

*Discover
Your Way*
at **NCTA**

I WANT TO MAKE A CAREER OUT OF MY GREEN THUMB

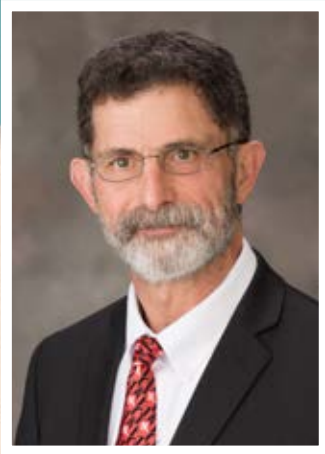
I WANT A CAREER THAT COMBINES
BUSINESS AND AGRICULTURE

I'D LIKE TO OWN MY OWN RANCH OR FARM

I WANT TO HELP ANIMALS



Nebraska College of Technical Agriculture
COLLEGE CATALOG
2016-2017



Ron Rosati
Dean
NCTA

Welcome to the Nebraska College of Technical Agriculture. NCTA is an outstanding college, known for its small classes, friendly faculty and highly successful students. We have a unique mission in the University of Nebraska system, with academic programs entirely in agricultural disciplines. We focus on tangible learning activities and hands-on education relevant to modern agricultural careers. At the end of a day of classes, students can look back on the past few hours and clearly see that they have developed specific skills that are immediately useful in various agricultural endeavors.

We prepare students to be leaders and entrepreneurs in agricultural industries and we do so in a warm and friendly environment. NCTA is small, easy to navigate, and very welcoming.-- The college is located in the small town of Curtis which is very supportive of NCTA students and college activities. We treat students, faculty, staff and other members of our college community with respect and kindness.

An important component of the mission of the Nebraska College of Technical Agriculture is to provide residents of Nebraska and surrounding states with access to higher education services. We give you the opportunity to succeed in college. Once students arrive on campus, our faculty and staff work very hard to help them achieve success. We provide opportunity academically, socially and financially. We are an open admissions institution. We keep the cost of tuition low to make higher education more affordable. Over the past few years, more than 90% of NCTA students have received financial aid. On average, Nebraska residents getting financial aid have received grant and scholarship awards that exceeded the cost of tuition and fees by \$700 per year. After paying their bill for tuition and fees, most in-state students received a check for more than \$700 to be used to pay for rent, food, transportation, books and other expenses associated with living and going to college.

Students are able to earn tuition, room, board and other expenses through a new program entitled, "Earn to Learn." Incoming freshmen are encouraged to explore this program and the positions available for campus work-study alongside faculty or staff mentors.

NCTA students have the opportunity to become engaged in exciting programs. You may become involved in a team for rodeo, ranch horse, livestock judging, shooting sports, crops judging, stock dog club or other organizations. NCTA Aggies often do very well

when competing nationally. Within the past year a barrel racer on our rodeo team placed 5th nationally, our crops judging team won a national title, agribusiness academic team was ranked number two nationally.

NCTA students now have the opportunity to enroll in a number of exciting new academic programs at NCTA such as irrigation technology and ranch horse management, in addition to our traditional outstanding academic strengths in veterinary technology, animal science, plant science, ag business agricultural mechanics and horticulture. NCTA students may also enroll in the UNL Bachelor of Applied Science degree at the Curtis campus. While working on their bachelor's degrees students have full access to the standard support services available to NCTA students such as the ability to live in the residence halls, access college advising and financial aid assistance, use NCTA library services, access computer services and participate in campus athletic activities. During their junior and senior years of the program, students take some NCTA classes but most courses are online from the College of Agricultural Sciences and Natural Resources (CASNR) at UNL.

We celebrate our passion for agriculture at NCTA. Our academic programs are comprehensive and consist entirely of agricultural disciplines. You'll see students on horseback riding across campus and you'll see students wearing spurs in the dining hall. Our 580-acre working farm is immediately adjacent to campus and easily accessible for classroom activities. We have an extensive array of animals used for class activities including cattle, horses, dogs, birds, snakes, alpacas, rodents, and other exotics.

This is a great time for our students to be entering the field of agriculture. We see an increasing demand placed on our agricultural industries to provide even more food for a growing world, to emerge as a source of energy, to address some of our society's health concerns, and to play a leading role in resolving the country's environmental issues. Profits in production agriculture have grown considerably in the past few years and the future of the industry is very bright. Students graduating from NCTA are prepared and eager to be involved with these issues.

When you're on campus feel free to stop by if you have questions, recommendations, or just wish to say hello! My door is always open. I'm also available by phone or email to answer questions or discuss issues. I'm looking forward to hearing from you!

Ron Rosati, Dean

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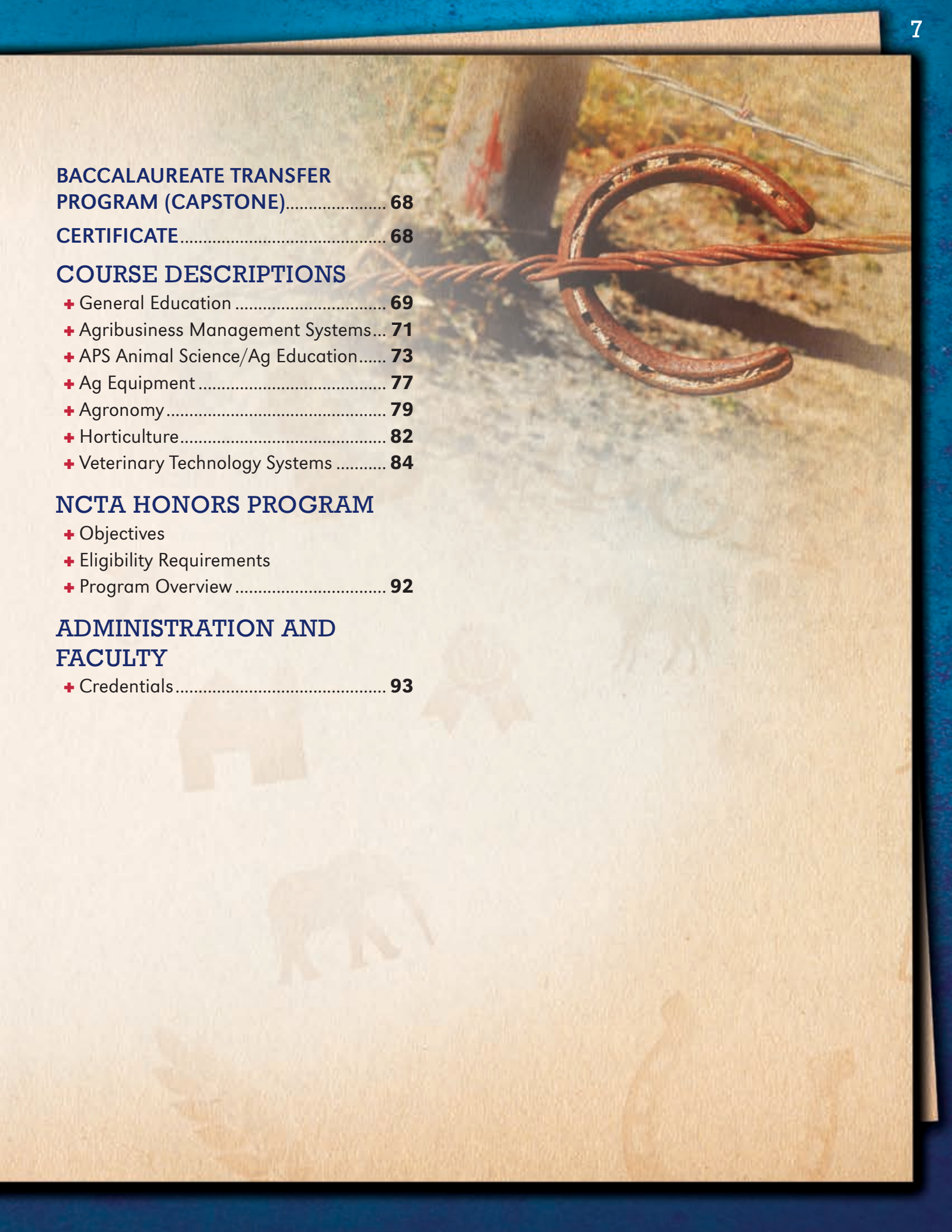
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ACADEMIC CALENDAR

Calendar is subject to change

AUGUST 2016

- 19** Residence Halls open for fall semester at 8 am
- 20-21** Freshman Orientation
- 22** Late Registration Begins (\$25 late registration fee assessed)
- 22** First Semester Classes Begin
- 30** Last day to drop a full semester course and receive a 100% refund

SEPTEMBER

- 2** Last day to drop a full semester course and receive a 75% refund
- 2** Last day to file a drop to remove course from student's record
- 3** All course withdrawals noted with a grade of "W" on academic record (through 12/1)
- 5** LABOR DAY (Student and Staff Holiday - NCTA Offices Closed)
- 9** Last day to drop a full semester course and receive a 50% refund
- 12** Last day to submit tuition and fees payment without penalty
- 16** Last day to drop a full semester course and receive a 25% refund - No refund after this date
- 29** Last day to DROP first 8-week course

OCTOBER

- 1** December Degree Applications Due
- 14** FIRST 8-WEEK FINAL EXAMS
- 14** First 8-Week Session Ends
- 17-18** FALL BREAK (Student Holiday – NCTA Offices Open)
- 17-18** Residence Halls Open (Fall Break)
- 19** Second 8-Week Session Begins

NOVEMBER

- 10** Registration Begins for Spring Semester 2017

- 23** Residence Halls close for Thanksgiving at 10 am
- 24** STUDENT HOLIDAY (NCTA Offices Open)
- 24-25** THANKSGIVING VACATION (NCTA Offices Closed)
- 27** Residence Halls reopen at 10 am
- 28** Last day to DROP second 8-week and 16-week courses

DECEMBER

- 12-15** FIRST SEMESTER FINAL EXAMS
- 15** END OF FALL SEMESTER (Student Holiday Break Begins)
- 16** Residence Halls close for winter break at 10 am
- 26-1/2** HOLIDAY CLOSEDOWN (NCTA Offices Closed)

JANUARY 2017

- 2** NCTA Opens from Holiday Closedown
- 8** Residence Halls reopen for spring semester at 10 am
- 9** Second Semester Classes Begin
- 9** Late Registration Begins (\$25 late registration fee assessed)
- 16** MARTIN LUTHER KING JR. DAY (Student and Staff Holiday – NCTA Offices Closed)
- 17** Last day to drop a full semester course and receive a 100% refund
- 20** Last day to drop a full semester course and receive a 75% refund
- 20** Last day to file a drop to remove a course from student's record
- 21** All course withdrawals noted with a grade of "W" on academic record (through 4/14)
- 27** Last day to drop a full semester course and receive a 50% refund

FEBRUARY

- 5** Last day to drop a full semester course and receive a 25% refund - No refund after this date

- 12** Last day to submit tuition and fees payment without penalty
- 15** May Degree Applications Due (also applications for August grads going through May ceremony)
- 17** Last day to DROP first 8-week course

MARCH

- 3** FIRST 8-WEEK FINAL EXAMS
- 3** First 8-Week Session Ends
- 6** Second 8-Week Session Begins
- 7** Registration begins for Summer Session 2017
- 17** Residence Halls close for Spring Break at 5 pm
- 20-24** SPRING BREAK (STUDENT HOLIDAY – NCTA Offices Open)
- 26** Residence Halls Reopen at 10 am

APRIL

- 10** Registration Begins for Fall Semester 2017
- 14** Last day to DROP second 8-week and 16-week courses
- 27-28** SECOND SEMESTER FINALS

MAY

- 1-2** SECOND SEMESTER FINALS

- 4** End of Spring Semester
- 4** GRADUATION!!
- 5** Residence Halls Closed for summer at 10 am
- 29** MEMORIAL DAY (NCTA Offices Closed)

JUNE

- 12** Summer Session Begins
- 15** Last day to drop a summer session course and receive a 100% refund
- 16** Last day to drop a summer session course and receive a 75% refund
- 23** Last day to drop a summer session course and receive a 50% refund

JULY

- 1** August Degree Applications Due
- 2** Last day to drop a summer session course and receive a 25% refund - No refund after this date
- 4** INDEPENDENCE DAY HOLIDAY (NCTA Offices Closed)
- 21** Last day to DROP an 8-Week summer session course

AUGUST

- 4** Summer Session Ends



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GENERAL INFORMATION

This is a Course Catalog for the Nebraska College of Technical Agriculture (NCTA). This catalog will serve as a reference during your time at NCTA. We hope the information contained will provide answers to your questions about NCTA.

Vision

The Nebraska College of Technical Agriculture will be an effective and nurturing student-centered learning community with a national reputation for producing graduates who are in high demand by cutting-edge industries.

Mission

The Nebraska College of Technical Agriculture is devoted to a statewide mission of preparing students for successful careers in agriculture, veterinary technology, food and related industries. The college provides open access to innovative technical education resulting in associate degrees, certificates, diplomas and other credentials.

Key Characteristics

Important and distinctive features of the NCTA experience:

- + Practical, applied, experiential, educational activities
- + Career-applied technical education
- + Programs relevant to job attainment and career development
- + Dedicated and caring faculty and staff
- + Low student-to-faculty ratio
- + Accessible land and animal resources for hands-on learning
- + Interaction and support from agricultural industries and employers
- + Close working relationship with the UNL Institute of Agriculture and Natural Resources (IANR) and the College of Agricultural Sciences and Natural Resources (CASNR)



ACCREDITATION

The Nebraska College of Technical Agriculture has been granted accreditation with the Higher Learning Commission. The American Veterinary Medical Association accredits the Veterinary Technology program. In addition, the College is approved to offer courses and majors for veterans benefits and training under the War Orphans Act.

The Higher Learning Commission

30 North LaSalle St., Suite 2400
Chicago, IL 60602-2504
800-621-7440

Facilities

The Nebraska College of Technical Agriculture occupies a 72-acre campus which adjoins the town of Curtis on the northeast. The facilities include Agriculture Hall (which houses the Associate Dean's and Dean's Offices, Business Office, Student Life Office, Agribusiness Management Systems Division, General Education Division, the Bookstore, a computer laboratory, and classrooms). The Livestock Teaching Center, completed in 2000, includes livestock classrooms, lab facilities and an arena with a 700-person seating capacity; the Education Center houses the Welcome Center, an auditorium, state of the art laboratories, a computer lab, Agronomy Office,



LOCATION

The Nebraska College of Technical Agriculture is located in the community of Curtis with a population of approximately 800 people on the gentle rolling plains of southwest Nebraska, in the northwest part of Frontier County. Curtis is located 8 miles east of Highway 83 between the cities of North Platte and McCook. The trade area population is approximately 3,500. The Curtis area is primarily agricultural, devoted to the production of corn, wheat, milo, and livestock.



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along with Student Services Office, Recruitments, Admissions, and the Financial Aid Offices. Other buildings on campus include four permanent residence halls; a cafeteria; a deli, the Student Union/Activities Center; the Fitness Center, the Learning Resource Center; a Horticulture Systems complex (including two greenhouses, and a classroom building), an Agriculture Equipment complex (which includes two large equipment labs, a small engine lab, a welding lab, irrigation lab, and buildings for classroom, painting, storage and maintenance use); and a Veterinary Technology Teaching and Laboratory Complex. A total of 200,000 square feet of instructional classroom and laboratory space is utilized in the educational majors.

The college also operates a 562 acre farm which serves as a field laboratory. The farm includes grain storage facilities, cattle growing and finishing facilities, and a completely diversified dry land and irrigated farming operation.

Computing at NCTA

Information Systems at the Nebraska College of Technical Agriculture provides easy access for the large variety of campus users. Currently, the campus has three computer labs comprised of PC systems of various speeds. All systems are capable of multimedia and are running the Windows.

Most faculty on campus use laptop computers extensively in the classroom teaching environment. Most classrooms are equipped with multimedia data projectors that are implemented in virtually every class. Most faculty use BlackBoard to distribute notes, lectures and assignments. All faculty and staff can be issued an e-mail address.

Networking on campus consists of a 100/1000 Mbps Ethernet network. Most locations on campus have access to a "wireless" connection. The wireless network is available to all faculty, staff and students on campus with the proper equipment and online registration. The network has a high-speed link off campus providing firewalled access to the Internet and Internet2.

The Computer Usage Policy for NCTA and the University of Nebraska is available upon asking Information Systems personnel and is also printed in the Student Handbook.

GENERAL INFORMATION

Catalog

The catalog should not be considered a contract between the Nebraska College of Technical Agriculture and any prospective student. The Nebraska College of Technical Agriculture reserves the right (without notice) to make changes in graduation requirements, costs, curriculum, course structure and content, the calendar of operations, and college personnel during the life of the catalog.

This college catalog will be in effect beginning with the 2016-17 academic year. Students should keep this catalog for referral throughout their academic career.

In accordance with the Family Education Rights and Privacy Act of 1974, NCTA may disclose public/directory information from the education records of a student who is in attendance at NCTA. Also, the student has the right to refuse to permit NCTA to disclose directory information. If a student wishes to have all public/directory information excluded as public information, the student must notify, in writing, the Registrar's Office no later than September 2.

The Nebraska College of Technical Agriculture does not discriminate in its academic, admissions or employment policies and abides by all federal and state regulations. NCTA is an affirmative action/equal opportunity institution. NCTA is in compliance with the Americans with Disabilities Act.

POLICIES INFORMATION

Student's Right to Know

In compliance with the Department of Education's Student Right-to-Know Act, all colleges and universities receiving Title IV funds are required to report various points of information to students, employees and prospective students.

The Student Right-to-Know Act requires an institution that participates in any federal student financial assistance program to disclose information about graduation or completion rates to current and prospective students. <http://ncta.unl.edu/faculty-staff-resources>

The following data is provided to fulfill the General Disclosure requirements relating to completion of graduation. Collection of data began in 1990 and is current through 2015. The Completion or Graduation Rate in 2015 for students who entered the Nebraska College of Technical Agriculture in 2012, on a full-time basis, was 53%.

Clery Act

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (commonly known as the Clery Act) is federal legislation designed to provide students, prospective students, and the public with uniform information from universities throughout the country on criminal problems and police and security issues. This brochure meets all reporting requirements as set forth in the Clery Act. Criminal statistics are updated by October 1 of each year.

Crime Awareness and Campus Security Act of 1990

Campus security and safety is an important factor of postsecondary education. The Crime Awareness and Campus Security Act of 1990 <http://ncta.unl.edu/faculty-staff-resources> is a federal law that requires colleges and universities to disclose information about campus crime and security policies. Colleges and universities that are eligible to receive Title IV funding must publish an annual report by October 1. The report must contain three years of crime statistics in various categories.

Net Price Calculator - <http://ncta.unl.edu/netcost>

Student Complaint Form - <https://nctaunl.wufoo.com/forms/student-complaint-form/>

Student's Rights and Responsibilities

In all cases, the Nebraska College of Technical Agriculture is included as part of the University of Nebraska and is under the control of the Board of Regents of the University of Nebraska.

Equal Educational Opportunity

The Nebraska College of Technical Agriculture affirms its policy of administering all educational programs, related support services and benefits in a manner that does not unfairly discriminate on the basis of a student's or prospective student's race, age, color, disability, religion, sex, sexual orientation, ethnic origin, marital status, or veteran status for admission, academic performance and conduct in accordance with policies, rules and laws applicable to student conduct.

The Board of Regents Bylaws, Chapter 5, contains a series of policies entitled "Responsibilities and Rights of Students." A number of those policies are contained in this section, with others being incorporated into other applicable sections.

Statement of Responsibility

All members of the academic community have the responsibility to create and support an educational environment, which will achieve the basic purposes of NCTA. Each member of the community should be treated with respect and dignity. Each has the right to learn. This right imposes a duty not to infringe upon the rights of others. The academic community should assure its members those opportunities, protections and privileges, which provide the best climate for learning. (Board of Regents-BOR Bylaws, Section 5.0)

Publicity of Rules Affecting Students

NCTA shall publicize and keep current all rules, regulations and policies concerning students and ensure that they are readily available to all students and other interested persons. (BOR Bylaws, Section 5.2)

Admissions and Continued Enrollment Criteria

NCTA shall publish the criteria for admission, academic progress, certificates and degrees for all programs of the Nebraska College of Technical Agriculture. Admission to NCTA and the privileges of the students

shall not be denied to any person because of age, sex, race, color, national origin, or religious or political belief. (BOR Bylaws, Section 5.2)

Academic Evaluation

The faculty members determine the character of the courses, which includes the content, instructional and grading procedures. Students shall be informed of the requirements, standards, objectives and evaluation procedures at the beginning of each individual course. Instructors should be available on a regular basis for consultation with students. Each student shall be given an unbiased evaluation of his/her performance and the specified grading procedure during the progress of the course, if requested. A student has the right to ask for clarification of the basis for his/her grade.

NCTA shall provide a faculty-student appeals committee for students who believe that evaluation of their academic progress has been prejudiced or capricious. Such procedure shall provide for changing of a student's evaluation upon the committee's finding that an academic evaluation by a member of the faculty has been improper. The procedure for this process is described under "Grade Appeals". (BOR Bylaws, Section 5.3)

Course Evaluation

Students can contribute significantly to the evaluation of instruction. The faculty has the obligation to solicit student evaluation of its educational efforts and to make changes in accordance with its best judgment. To assist the faculty in the task of providing the best possible education, NCTA has a standing procedure through which students have an opportunity to report their perceptions of courses and the methods by which they are being taught. This procedure, however, shall protect members of the faculty from capricious and uninformed judgments. (BOR Bylaws, Section 5.3)

GENERAL INFORMATION

STATEMENTS ON STUDENT LEARNING AND IMPROVEMENT - PHILOSOPHY OF STUDENT LEARNING ASSESSMENT

The Nebraska College of Technical Agriculture believes that the college can influence how well and how much students learn. As an institution of higher learning, the mission of the Nebraska College of Technical Agriculture "is dedicated to the development of innovative individuals for the agriculture industry and related science."

Academic assessment provides systemic, routine processes that allow the faculty and students to determine the degree that students are achieving the stated student learning outcomes. The following questions guide the assessment process.

1. How are students learning?
2. Are our students learning?
3. How much are students learning?
4. To what extent are students learning?

STUDENT RECORDS: INCLUDING FAMILY EDUCATIONAL RIGHTS & PRIVACY ACT

Annual Notice to Students

The Nebraska College of Technical Agriculture complies fully with the Family Educational Rights and Privacy Act of 1974, as amended. This Act was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office concerning alleged failures by the institution to comply with the act.

Kind of Information Maintained

Academic, behavioral, and "public directory" information is maintained on all enrolled students. Grade transcripts and files of graduates and withdrawn students are kept in the Registrar's Office.

Normal Access to Files

Access of non-public or non-directory information is granted to faculty and support staff personnel only for purposes related to their educational function and/or job responsibilities. Any access other than to the student or as mentioned above, is allowed only by written consent of the student.

When a student provides written consent for release of information to another college, business, or agency, the university office or department complying with the request will notify the college, business, or agency involved that it may not pass on the information obtained to the third party without the further consent of the student.

NCTA reserves the right to deny copies of records, including transcripts, not required to be made available by FERPA in any of the following situations:

- + The student has unpaid financial obligations to the College.
- + There is an unresolved disciplinary action against the student.
- + The education record requested is an exam or set of standardized test questions. (An exam or standardized test which is not directly related to a student is not an educational record subject to FERPA's access provisions.) Students who wish to gain access to their files should contact the Registrar's Office.

Challenge Procedures

Students who wish to challenge the accuracy of any document contained within a cumulative file should

contact the director of the office which maintains that file. The director will hear the student's reasons for the challenge and attempt to informally resolve or arbitrate any contested points or issues. If an informal disposition cannot be made, the student has the right to a hearing before an impartial board duly established for such purpose. Students desiring a hearing should contact the appropriate director to: (1) request a hearing, (2) establish a hearing date, and (3) obtain copies of the hearing board's rules or procedures.

Public or Directory Information

The University of Nebraska/NCTA defines the following student information as public directory information.

- + Student's name
- + Local address
- + Permanent address
- + Telephone numbers
- + Year at NCTA
- + Dates of attendance
- + Major field of study
- + Enrollment status (full-time, part-time)
- + Participation in officially recognized activities and sports
- + Weight and height of member of athletic teams
- + Degrees, honors and awards received
- + Previous educational institution attended

Students are advised that information other than public or directory information may be released in emergency or life-threatening situations.

Directory information will be available to the public upon request and may be included in student directories published electronically and in hard copy.

Nondiscrimination Policy

The University of Nebraska-Nebraska College of Technical Agriculture (NCTA) is committed to creating a diverse and inclusive work and learning

environment free from discrimination and harassment. NCTA is dedicated to creating an environment where everyone feels valued, respected and included. NCTA does not discriminate on the basis of race, ethnicity, color, national origin, sex (including pregnancy), religion, age, disability, sexual orientation, gender identity, genetic information, veterans status, marital status, and/or political affiliation in its programs, activities and employment. NCTA complies with all local, state and federal laws prohibiting discrimination, including Title IX, which prohibits discrimination on the basis of sex.

Students on each campus of the University of Nebraska shall be admitted and (shall) enjoy the programs and privileges of the University without regard to individual characteristics other than qualifications for admission, academic performance, and conduct in accordance with University policies and rules and law as applicable to student conduct.

This policy is enforced by the Nebraska College of Technical Agriculture in regards to the federal laws under Title IX of the Educational Amendment of 1972, Title VI of the Civil Rights Act of 1964, and section 504 of the Rehabilitation Act of 1973. Inquiries regarding compliance with these statutes may be directed to the Affirmative Action Office, c/o Office of the Chancellor, 308 Administration Building, University of Nebraska-Lincoln, telephone: 402-472-3417 or to the Director of the Office for Civil Rights, Department of Health, Education and Welfare, Washington D.C.

The following persons have been designated to handle inquiries regarding non-discrimination policies:

Title IX or Discrimination Inquiries:

Jennifer McConville, Title IX Coordinator and Associate Dean for Finance, Operations and Student Services; 404 E. 7th; Curtis, NE; (308) 367-5259; jmconville2@unl.edu

Disability or Discrimination Inquiries:

Kevin Martin, ADA/504 Compliance Officer; 404 E. 7th; Curtis, NE; (308) 367-5217; kmartin4@unl.edu

GENERAL INFORMATION

Student Discrimination Grievance Procedures.

Any student with a grievance regarding discrimination on the NCTA campus by campus personnel should present the grievance to the Student Services Office. If the grievance is not resolved, it will be forwarded to the NCTA Title IX Committee for review. The Title IX Committee will conduct a complete investigation and recommend appropriate actions to be taken to the administration for NCTA.

American Disabilities Act. Qualified persons entering the NCTA campus, should enter the east side of Ag Hall as marked by signs. A telephone is available for services. We encourage you to call 308-367-5217 in advance to assure personal help is available on arrival.

NCTA Clean Air Policy

NO TOBACCO PRODUCTS MAY BE USED IN FACILITIES OR VEHICLES OF THE UNIVERSITY OF NEBRASKA EXCEPT AS SPECIFICALLY DELINEATED BELOW.

Use of tobacco products on the grounds of NCTA is allowed as long as such use is not within close proximity (defined as within 10 feet) of any facility or work site. All residence halls are smoke free.

Free consultations and information are available through Student Health Services which is located at the Curtis Medical Center for those students who wish to stop smoking.

Noncompliance with these provisions will be managed in accordance with existing personnel guidelines.

University Of Nebraska Harassment Policy

The University of Nebraska reaffirms that all women and men - students, staff, faculty and administrators - are to be treated fairly and equally with dignity and respect. Any form of sexual harassment is prohibited. Sexual harassment is unwelcome sexual advances, requests for sexual

favours, and other verbal or physical conduct of a sexual nature when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic standing.
2. Submission to, or rejection of, such conduct by an individual is used as the basis for employment decisions or academic decisions affecting such individuals, or
3. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working/academic environment.

Sexual harassment will not be condoned during the work or school day, nor will acts of sexual harassment be permitted outside the work or school environment or within a student/teacher relationship.

Inquiries and grievances: The University of Nebraska provides grievance procedures for anyone associated with the University who believes he or she has not received the benefit of this policy.

Questions about the filing of grievance are to be directed to:

Office of the Dean
Room 26 Ag Hall
404 East 7th Street
Curtis, NE 69025
Phone: 308-367-5200

Affirmative Action/Equal Opportunity Policy

It is the policy of the University of Nebraska and the Nebraska College of Technical Agriculture, Curtis, Nebraska not to discriminate based on gender, age, disability, race, color, religion, marital status, veteran's status, national or ethnic origin, or sexual orientation in its educational programs, admissions policies, employment policies, financial aid, or other college administered programs. This policy is enforced by federal law under Title IX of the Education Amendments of 1972,

Title VI of the Civil Rights Act of 1964, and Section 504 of the Rehabilitation Act of 1973. Inquiries regarding compliance with these statutes may be directed to the University of Nebraska-Lincoln Office for Equity, Access and Diversity Programs, 128 Administration Building, Lincoln, NE 68588, telephone (402) 472-3417 or to the Director of the Civil Rights, Department of Health, Education and Welfare, Washington, D.C. All course offerings listed in this publication are contingent on approval of budget and adequate enrollment. The Nebraska College of Technical Agriculture reserves the right to change the information and regulations included in this catalog.

Insurance

NCTA strives to provide a safe environment for its students, however, due to the inherent dangers associated with agriculture, students are encouraged to obtain adequate health and life insurance while attending NCTA.

FACULTY/STAFF RESOURCES

Parking Services

Employees and students parking on the NCTA campus must purchase a parking permit annually every August with the start of the school year by completing the vehicle registration form.

Students with permits are allowed to park in the student designated parking areas only, not in the faculty/staff or employee parking areas. Faculty/Staff/Employee parking areas require a permit, which is different from the student permits.

A permit is required for each vehicle parked on campus (if you have 2 vehicles, you will need 2 permits. If you drive different vehicles at various times to campus, you may move your permit to the vehicle you are driving that day (please list all vehicles on the registration form).

Parking permits are the property of the University of Nebraska – NCTA and are issued to a specific individual. Ownership is not transferable. By obtaining a parking permit, the permit holder agrees to become familiar with and abide by the rules and regulations.

Please remove any previous year's permits. Place the permit behind your rear view mirror with the information side facing the window. To avoid a violation the tag needs to be visible at all times. Vehicles will be ticketed without a valid parking permit.

Parking violations are issued, if you park in an undesignated area. Parking fines are \$25.00 payable in the Facilities Office in Ag Hall #22.

Upon receiving a violation, you have 15 days to pay. If the violation is not paid in 15 days, a hold is placed on the student's MyNCTA account. Holds prevent a student from registering for classes and/or checking out at the end of a semester. A hold can also prevent a student from participating in extra-curricular activities. You have 5 days to appeal the violation in writing to NCTA Parking Services (Facilities Office) with justification for overturning the violation. Within five days of your written appeal the NCTA Parking Services will send you a letter as to why or why not your appeal was granted. Please include the citation number on all correspondence.

In accordance with UNL-NCTA Parking Services policy, the following reasons are considered as frivolous and not valid as a basis for appeal:

- + Lack of knowledge of the regulations, for example, new to campus or have not reviewed regulations;
- + Other vehicles were parked improperly;
- + Only parked illegally for a short period of time;
- + Stated failure of parking officer to ticket previously for similar offenses;
- + Late to class or appointment;
- + Inability to pay the amount of the fine;
- + No other place to park.

Permit holders are urged to protect their permits from theft by locking their vehicles. If a permit is lost or stolen, you are required to report the loss to the NCTA Facilities Office, in person, immediately. At that time a free temporary permit will be issued for two weeks. If the permit is not located within those two weeks, you will be required to purchase a new

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permit at the current price of the permit. If the original permit is recovered, the replacement fee will be refunded. The use of any unauthorized, stolen, counterfeit, altered, or reproduced permit will result in confiscation of the permit, revocation of parking privileges for one calendar year, a fine of \$50 and a report filed with the NCTA Dean.

ADMISSIONS INFORMATION

Admission Requirements

A high school diploma or the equivalent and the ACT, Compass, or Asset assessment test are required for entrance into the Nebraska College of Technical Agriculture (NCTA). In order for you to be officially accepted without provision, you must submit a complete high school transcript of grades or the equivalent and your ACT scores.

If you are accepted with a provision, the absent information must be submitted within your first semester or session on campus or you will be dismissed at the end of that semester or session.

Application Procedures

To enroll at Nebraska College of Technical Agriculture:

1. Complete the online Application for Admission/
Mail a \$25.00 nonrefundable application fee to:

Nebraska College of Technical Agriculture
Office of Admissions
c/o Vicky Luke
404 East 7TH Street
Curtis, NE 69025-9502
2. Applicants must request that all FINAL high school and/or college transcripts be sent to the Student Services Office.
3. All students who attend the Nebraska College of Technical Agriculture are required to take the Asset, Compass, or ACT assessment test. Test scores are used for scholarships, advising, and guidance purposes. The ACT is used for in house scholarship purposes. The college's ACT identification number is 2458.

4. Students are required to complete and submit the NCTA Health form along with required immunizations before attending classes.
5. Students should apply as early as possible to assure admittance to the major and classes of their choice.
6. Part-Time Students in High School:
 - a. Must be a high school junior or senior.
 - b. Obtain the recommendation of your high school principal or guidance counselor.
 - c. Apply online.

International Application Procedures

<https://nctaglobal.unl.edu>

1. Pay your fee and verify funds. The application fee and verification of funds need to be sent to NCTA by the following deadlines:
 - March 1 for Fall admittance
 - September 1 for Spring admittance
 - January 1 for Summer admittance

Please mail that to NCTA at:

NCTA
c/o Vicky Luke
404 E 7th St
Curtis, NE 69025

All students are required to demonstrate financial ability to pay for at least one year of academic and living expenses before being issued an immigration document (I-20).

All supporting financial documents must be in English or accompanied by a notarized English translation showing available liquidable funds. The financial documents cannot be older than three months at the time of submission to Nebraska College of Technical Agriculture in order to be considered valid. Appropriate documents reflecting financial ability include, but are not limited to, the following:

- Bank Letter, stamped and signed by a bank official, and specifies the date, monetary currency, and name of the account holder.
- NCTA Dean's Scholarship Letter
- Signed letter from the U.S. Government, Home Government, International Organization, Company, or Employer on government or organizational letterhead specifying dates, amount, monetary currency, and terms of sponsorship.
- An individual sponsor who is not a U.S. citizen, U.S. Permanent Resident, or non-immigrant legally present in the U.S., must sign the CFIS Form and attach supporting financial documents.
- An individual sponsor who is a U.S. citizen, U.S. Permanent Resident, or non-immigrant legally present in the U.S., must submit a completed I-134 Affidavit of Support Form with supporting financial documents.

Please note that these supporting financial documents will also be required at the U.S. Embassy or Consulate when you apply for your visa.

2. Apply for admissions.

You will apply online at this website: <http://ncta-global.unl.edu/apply>.

During this process, you will:

- Set up your NUID number. It is important that you retain this NUID number for registration and enrollment. Registration and enrollment will happen in later steps of your admission to NCTA.
- Submit official secondary school transcripts, which will be verified by NCTA.
- Verify that your deposit has been paid.
- Submit your TOEFL scores. A score of 90 or above will not be required to attend an English training program.

3. After your application is completed and your documents have been certified, you will receive a letter of acceptance.

4. Set up your interview with the US Consulate to start I-20 paperwork.

5. You will receive admissions information, including the following:

- Instructions on MyNCTA
- Release information (pictures, articles, etc.)
- NCTA Policies
- Orientation dates and times
- WiFi instructions
- Information on dorm rooms and dining services
- Room assignments
- Meal plan information

Campus Visitors

Prospective students and any other interested people are invited and encouraged to visit the Nebraska College of Technical Agriculture Monday through Thursday at 10:30 a.m. or 1:30 p.m. and Fridays at 10:30 a.m. These visits may be scheduled by calling Kevin Martin at (308) 367-5217 or 1-800-328-7847. You may also schedule a tour online at <http://ncta.unl.edu/tours>.

FEES INFORMATION

Residency Requirements

Individuals seeking to establish resident status for tuition purposes who are subject to the one (1) year minimum requirement, must be able to demonstrate that they have established homes in Nebraska at least one (1) year prior to the term they apply for resident status. Acceptable documentation for verifying the one (1) year residence period includes:

1. Proof of home ownership
2. Apartment lease
3. Cancelled rent receipts/checks

Any other type of documentation must be approved by one of the University's residence officers. In addition to the one (1) year requirement, applicants will also be expected to obtain a checking or savings account with a Nebraska financial institution and have held these documents for a reasonable period of time (usually at least one month). All twelve months of the residency requirement must be documented.

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Financial Obligations

It is the responsibility of students to satisfy all financial obligations to NCTA. Failure by a student to pay a financial obligation to the University or to any department, division, or agency thereof, will result in denial of readmission, denial of transcripts, denial of registration for ensuing terms, and withholding of diplomas, and in addition, may result in dismissal and/or denial of grade reports, until such debt be paid in full. (RP-5.3.1)

Student Fees

The student's on-line MyNCTA account will electronically notify with the email provided that the tuition and fees billing has been generated. It is the responsibility of each student to monitor their account and notify appropriate parties having payment responsibility. The "Activity Since Last Monthly Statement" screen will allow daily monitoring but a consolidated statement will be available by the 25th of each month. Payment deadlines are always the 12th of the month following the bill date.

A student must contract for both room and board at double occupancy rates unless conditions are met to waive. Room and board reservation requires a \$250 security deposit to be held by NCTA until all conditions have been met. The room and board charges will be due in accordance to the above monthly billing schedule.

All fees and other charges may be changed at any time by the Board of Regents of the University of Nebraska.

2016-2017 Tuition

Nebraska Resident per credit hour	\$121
Non-Resident per credit hour	\$256.50
Dual Credit.....	\$60.50

Fees

Academic/Student fee (per semester) Per Credit Hour.....	\$19.62
Registration Fee for Course Enrollment Per Semester	\$20

Special Fees

Continuing Ed Course	\$25
Delivery Fee (per credit, if needed, up to \$25)	
Graduation Fee.....	\$25
Application Fee.....	\$45
Parking Permit (Annual: Administration, Faculty, Staff, Students)	\$20
Textbooks (average cost per semester)	\$500
Transcript Fee.....	\$5

FINANCIAL ASSISTANCE

Financial assistance information is available in the Office of Financial Aid. If you are or will be receiving financial assistance, it is important for you to carefully read the following Satisfactory Academic Progress Policy:

Satisfactory Academic Progress Policy

Nebraska College of Technical Agriculture is required by federal regulations to establish a Satisfactory Academic Progress (SAP) policy students must meet to be eligible or maintain eligibility for federal and state financial aid. This includes but is not limited to grants, loans and federal work study. There are three components to the Satisfactory Academic Progress Policy which are: 1) pace, 2) grades and 3) time frame. These are monitored each semester.

Pace:

A student must be making progress through his/her educational program at a pace of 67% or higher. Pace is calculated by dividing the cumulative number of successfully completed credit hours by the cumulative number of attempted credit hours. Credit hours that will not count as successfully completed include letter grades of F (Fail), I (Incomplete), NP (No Pass), W (Withdrawal), AU (Audit) or NR (Not Reported). A student that is able to have one of the above listed grades changed to a grade of D or higher should contact the Financial Aid office to see if the change impacts the pace calculation. A repeat class will be funded only the second time taken provided the student is meeting the SAP policy.

Grades:

A student must maintain a minimum grade point average depending on the number of credit hours attempted:

- 1 through 17 credit hours: Cumulative Grade Point Average 1.5 or higher
- 18 through 35 credit hours: Cumulative Grade Point Average 1.75 or higher
- 36 and above credit hours: Cumulative Grade Point Average 2.0 or higher

Time Frame:

Students are permitted to receive financial aid only until the total number of credit hours attempted equals 150% of the length of his/her program. (see program descriptions in the NCTA course catalog) For a 76 credit program, the total allowed credit hours attempted would be $76 \times 150\% = 114$ hrs. Transfer hours count toward the total number of credit hours attempted. A second course of study must also fall within this 150% time frame in order to receive federal financial aid.

Warning:

A student will be placed on financial aid warning for one semester if he/she fails to maintain the required cumulative GPA and/or fails to meet the 67% pace requirement. All aid will be paid during the warning semester. If standards are not met at the end of the warning semester, all aid will be suspended until eligibility is re-established.

Suspension:

A student will be placed on financial aid suspension and receive no federal or state financial aid if he/she fails to meet the Satisfactory Academic Progress requirements at the end of the warning semester.

Regaining Eligibility after Suspension:

A student that has had financial aid eligibility suspended has two options for regaining his/her eligibility:

1. A student may qualify for reinstatement of financial aid eligibility by enrolling at his/her own expense. A student must bring his/her cumulative GPA back to the level necessary in the above chart for the number of hours attempted

and bring his/her pace up to the 67% to meet the minimum requirements of the Satisfactory Academic Progress policy.

2. A student may appeal his/her financial aid suspension if extenuating circumstances (death of a relative, injury or illness of the student, or other special circumstances) exist. A Satisfactory Academic Progress Appeal form should be completed and must include supporting documentation of the extenuating circumstances. Examples: Letters from health providers, copies of medical bills showing health provider visits, or any other statements or documentation to support the extenuating circumstance that prevented the student from making satisfactory progress. Also include information about what has changed in the student's situation that would allow him/her to demonstrate satisfactory academic progress at the next evaluation.

If the Appeals Committee approves the appeal, the student is placed on Financial Aid Probation for the subsequent semester of enrollment. At the end of Financial Aid Probation, the student must meet the Satisfactory Academic Progress standards or meet the expectations of the Academic Plan the Appeals Committee established to continue receiving financial aid.

Planning and Assistance

In planning to attend the Nebraska College of Technical Agriculture, a student should expect the following typical expense items for each semester: tuition and general fees, room, board, books and supplies. In addition, allowances should be added to these figures for personal expenses, transportation and extra charges for special curriculums (such as Veterinary Technology lab jackets, supplies, and higher book costs, etc.) The Financial Aid Office will consider the total costs for attendance, including the items listed above, when making a financial aid commitment.

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Procedures for Applying for Financial Aid

To apply for all need-based financial assistance (Federal Pell Grant, Federal Supplemental Education Opportunity Grants (FSEOGs), Nebraska Opportunity Grant (NOG), Federal Student Loans, or Work Study), you and your parents must complete the Free Application for Federal Student Aid (FAFSA). The FAFSA may be filed electronically at www.fafsa.gov.

To avoid any delays in processing your FAFSA, please follow these helpful hints:

- + File your tax returns electronically.
- + File the FAFSA using IRS data retrieval process (IRS data will be available two weeks after filing your tax return electronically).
- + Complete your FAFSA as soon as possible after January 1.
- + Read the instructions carefully.
- + Always use your correct Social Security number. Your Social Security number is the primary means of identifying your records.
- + Designate the Nebraska College of Technical Agriculture as a recipient of the information on your FAFSA (federal school code is 007358).

Withdrawal Time, Percentage of Tuition and Fees Refunded

16 Week Sessions (Fall and Spring Semesters)

1st Week	100%
2nd Week	75%
3rd Week	50%
4th Week	25%
No refund after the end of the 4th week	

8 Week Session

Prorated

Summer Session

1st Week	Prorated
No refund after the end of the 2nd week	

Respond quickly and accurately to any requests for additional information. Some of the financial aid that is available will only be available to students who apply and submit any necessary documentation early in the award process. Notice of Awards and Acceptance will be found on MyNCTA after the verification process has been completed.

Refund Policy

The Higher Education Amendments of 1998 state that when a student receives Title IV, HEA program funds to attend an institution and subsequently withdraws, drops out, or otherwise fails to complete the period of enrollment for which he or she was charged, the ***institution is required to make a refund of "unearned tuition, fees, room and board and other charges" assessed the student by the institution.*** Federal regulations require that the Student Services Office and Financial Aid Office determine the last day of attendance for all students who do not officially withdraw from the college. If the last date of attendance is not reported for each student, the law stipulates the mid-point of the payment period be used as the drop date, which could result in a substantial aid repayment penalty for the student.

The amount of Title IV grant and loan assistance the ***student must repay*** is calculated by determining the complement of the percentage of assistance the student earned and applying it to the total amount of grant and loan assistance that was disbursed to the student for the period of enrollment as of the day the student withdrew. A printed example of the application of the refund policy is available upon request.

Title IV funds returned by the school or student are credited to outstanding Title IV loan balances for the student. If excess funds remain after repaying all outstanding loan amounts, the remaining amount is credited to grant programs beginning with the Pell Grant. It is NCTA's policy that a portion of the funds that it is required to return to comply with Title IV requirements may be charged back to the students for unpaid services payable to NCTA.

For students who withdraw from college before the end of each session, tuition fees and housing charges will be refunded based upon the following schedule:

Room and Board refunds are based on a 16-Week session.

Rehabilitation Benefits

Anyone 16 years of age or over with a permanent disability may be eligible for benefits if schooling will allow him/her to become employable within a reasonable length of time. Financial assistance provided may include cost of living expenses, books, tuition, and transportation during training. Further information may be obtained from your local State Department of Education, Division of Rehabilitation Services.

We strongly encourage students to work closely with rehabilitation counselors and have them maintain contact with the students' academic advisors.

Selective Service Registration

Federal Law requires young men to register with the Selective Service System at any U.S. Post Office, or on-line. Young men are to register sometime during the period beginning 120 days prior to their 18th birthday until 30 days after their 18th birthday. No financial aid may be awarded until this requirement is met.

Sources of Financial Assistance

- + Federal Pell Grants
- + Campus-Based Programs
 - Federal Supplemental Education Opportunity Grants (FSEOGs)
 - Federal Work Study (FWS)
 - NOG – Nebraska Opportunity Grant
 - Federal Perkins Loans
- + Federal Direct Loans
 - Federal Subsidized Stafford Loans
 - Federal Unsubsidized Stafford Loans
 - Federal PLUS Loans

Grants (Pell Grants, FSEOG's, and NOG's) do not have to be repaid; loans (Perkins Loans, Federal Direct Loans, and PLUS loans) must be repaid. FWS provides students with income from part-time jobs. Federal Pell Grants are awarded through strict rules set by the Department. If a student is eligible on the basis of these rules, an eligible school pays the student his or her Federal Pell Grant using federal funds.

For the campus-based programs, the Department funds participating schools annually at a specified level. The school then awards these funds to students following federal guidelines. When those funds are spent, no more campus-based aid is available at that school. Therefore, the earlier an eligible student applies, the more likely he or she is to receive campus-based aid.

1. **Perkins Loan** - The Federal Perkins Loan Program provides long-term, low interest loans to students with established financial need. The maximum amount a student can receive is \$5,500 per year. Interest starts accumulating at the rate of 5% annually nine months after you leave college, repayment begins 12 months after you leave college. You may be allowed up to 10 years to repay the loan. NCTA, however, has a limited amount of Federal Perkins Loan money so eligible students must apply early to receive these funds.
2. **Federal Direct Stafford Loans** - There are two types of Federal Direct Stafford Loans - Subsidized and Unsubsidized. A student qualifies for a Federal Direct Subsidized Stafford Loan based on financial need, as determined under federal regulations. A student's need is not a factor in determining eligibility for a Federal Direct Unsubsidized Stafford Loan. It is possible for a student to have a Direct Subsidized and Direct Unsubsidized Stafford Loan for the same award year. A student can borrow a combination of loans based on the cost of education minus other financial aid up to maximum annual loan limits and/or cost of education. **Important** - Federal Direct Unsubsidized Stafford loans have many of the same terms and conditions as the Federal

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Direct Subsidized Stafford Loan (i.e., loan limits, origination/insurance fees, and deferments). However students are responsible for the interest during in-school, grace and deferment periods. Interest accruing during those periods may be paid or capitalized as agreed to by the borrower and the servicer.

- 3. Federal Direct PLUS Loans** – The Federal Direct PLUS Loan Program assists eligible parents in meeting educational expenses. The Federal Direct PLUS Loan allows parents to borrow up to the cost of attendance minus other resources. The U.S. Department of Education is the lender and delivers the loan money to you through NCTA. Students must be attending school at least half-time to be eligible. PLEASE NOTE: Federal Direct PLUS Loan funds are applied

ahead of all other financial aid funds your student may receive, regardless of when the PLUS Loan funds are applied.

SCHOLARSHIPS: The Nebraska College of Technical Agriculture (NCTA) is committed to assisting current and potential students achieve their educational goals by offering scholarships that help pay for tuition, books and school related expenses. With the support of generous donors, scholarships can range from \$100 to \$2,500. To be eligible for scholarships students must be accepted and enrolled as a student at NCTA. Monies received in the form of scholarships do not have to be repaid.

To be considered for a scholarship/remission at the Nebraska College of Technical Agriculture a student must:

- + Have a 2.5 CGPA (most scholarships require a 2.5 or higher);
- + Complete the admissions process;
- + Take the ACT, Compass, or Asset test and have the scores sent to the college;

Student Employment

Federal Work Study (FWS) - provides federal funds for work opportunities for students. To be eligible for this program, you must demonstrate financial need. By submitting a Free Application For Federal Student Aid (FAFSA) you will automatically be considered for FWS.

Part-time Employment - NCTA and surrounding area businesses (including farm and ranch operations) offer some part-time employment to students. Interested students should inquire at the NCTA Student Services Office.

Veterans Training

1. Educational Assistance

The Nebraska College of Technical Agriculture is approved for veterans training and for training under the War Orphans Act. It is recommended

Listed below are sponsors of various scholarships given to NCTA students

- Arrow Seed Company
- Curtis Aggie NCTA Scholarship
- CHS
- Chandra Castle Memorial Scholarship
- DR CL and Lydia Miller Memorial Scholarship – Vet Tech
- Don Ringstmeyer Memorial Scholarship
- Education Quest Foundation Educational Award Fund – NCTA
- Francis Jorgensen Estate Scholarship
- Fred & Edna Hecht Scholarship
- Gudmundsen NCTA Scholarship
- Jack McCaffery Memorial Scholarship
- Jean Sullivan & Richard Rawson Scholarship
- Lancaster County Farm Bureau
- Nebraska College of Technical Agriculture Scholarship
- Nebraska College of Technical Agriculture – Veterinary Technology
- NCTA 100 Beef Cow Program Scholarship
- NCTA Endowed Scholarship
- NCTA Scholarship
- Samuel S and Ruth S Kamino DVM Scholarship
- Sharon Beebe Lytle Scholarship
- Sylvia Clawson by Ted English
- Tim Sheehan Memorial
- Wayne & Fern Wolgamott Memorial Scholarship

that those enrolling under the direction of the Veterans Administration have adequate funds for tuition and other expenses until their first sustenance check arrives.

Veterans interested in veteran's benefits should contact their local county service officer or their Regional Veterans Administration Office.

2. Vocational Rehabilitation

Students who are vocationally disabled due to a disability are eligible for training under the supervision of the Veterans Administration Rehabilitation services. Application should be made to the veteran's county service officer.

3. Nebraska National Guard Tuition Credit

Up to 75% of tuition credit may be given to members of the National Guard who are attending college.

ACADEMIC INFORMATION

Academic Bankruptcy

Academic Bankruptcy is available to NCTA students who have a GPA or CGPA of less than a 2.0 and have completed no more than two academic semesters.

To apply for Academic Bankruptcy, the following conditions must be met:

1. Prior to or by the end of the first week of a semester or summer session, an application for Academic Bankruptcy must be submitted to a committee consisting of the Division Chair, the previous major Advisor and the new major Advisor if changing majors, or a faculty member from the major the student is enrolled in.
2. Following the Academic Bankruptcy application, all grades for the semester/session in which a student is enrolled for a minimum of 12 credit hours must be a 2.0 or above. If this requirement is met, all grades that are less than a 2.0 will be removed from grade consideration. If this requirement is not met, the student's grades

will not be removed from grade consideration. Application for Academic Bankruptcy does not have any effect on eligibility for financial aid. All students on financial aid must continue to meet the "Standards of Progress".

Academic Responsibility

Students are expected to be honest in all aspects of their college work.

The University of Nebraska Undergraduate Bulletin states: "The maintenance of academic honesty is a vital concern of the university community. Any student found guilty of academic dishonesty shall be subject to both academic and disciplinary sanctions." Academic dishonesty includes, but it is not limited to the following:

- Cheating
- Fabrication and Falsification
- Plagiarism
- Abuse of Academic Materials
- Complicity in Academic Dishonesty
- Falsifying Grade Reports
- Misrepresentation to Avoid Academic Work

Academic judgments about a student's work (including questions of cheating) are the responsibility of the instructor. Normally, disagreements are resolved by means of the conference between the student and instructor. However, if a student feels (s)he is treated unjustly, (s)he can take their case to their Division Chair (if the Division Chair should be his/her instructor, (s)he may then present his/her case to the Chair of the Academic Council). The instructor must inform the student of this right. The student may make a further appeal to the NCTA Dean if (s)he is not satisfied with the Division Chair's and Academic Council's responses.

One or more violations involving cheating may be cause for the student to be placed on probation or dismissed from college.

Academic Standards

Probation, Dismissal, and Withdrawal

Good Academic Standing: A cumulative grade point average (CGPA) of 2.000 or greater.

Academic Probation: A temporary status due to low academic grades. Improvement in academic grades is needed for continued enrollment. A student is placed on probation due to one of the following conditions:

- Semester or Cumulative GPA is lower than 2.000
- Conditionally admitted as a transfer or new freshman
- Readmitted after leaving while on probation or when dismissed for academic reasons

Academic Dismissal: Termination of enrollment due to one of the following conditions:

- Semester GPA and Cumulative GPA is less than 2.000 at the end of two successive semesters.

If a student earns a 2.500 or higher GPA in the 2nd semester of Academic Probation, but the cumulative GPA is below 2.00 for 2 successive semesters, the student will be granted an additional or third semester on Academic Probation.

Readmission Application Timeline Following Dismissal:

- One semester must lapse if academically dismissed.
- Two years must lapse if academically dismissed, readmitted, and failed a second time to earn the required grade point average.

Appeal Process to Dismissal: If circumstances were so unusual and out-of-the-ordinary that academic performance was significantly and temporarily impacted, the dismissal decision may be appealed. The appeal process is handled by the Associate Dean.

Adding a Class

Students may add classes on "MyNCTA" prior to and during the first week of any semester or session. After that period a "Registration Change" form is required with the instructor's and advisor's signature in order to add the class. These forms may be

picked up from the Student Services Office and when completed, returned to that office.

Student Attendance Policy

Class attendance and participation is a primary requirement for success as a college student. Therefore, NCTA students are strongly encouraged to attend all classes. However, absence may occur under certain circumstances. The purpose of this policy is to outline procedures for addressing classroom absence.

Absence for Approved College Activities

NCTA students are often presented with the opportunity to participate in approved college activities (hereafter referred to as "enrichment activities") which conflict with regularly scheduled classes. Examples of enrichment activities include field trips, attendance at special college lectures, and participation on college teams such as the crops judging team, the ranch horse team or the livestock judging team. Participation in enrichment activities is an important part of an NCTA education and it is one of the primary attributes that differentiates an NCTA education from that received at a more traditional lecture-based college.

Students are encouraged to participate in college sponsored enrichment activities, however they need to integrate these activities with the requirements of regularly scheduled classes. NCTA faculty understand the value of enrichment activities and accommodate reasonable student absence for participation in approved activities. Students participating in college sponsored enrichment activities which conflict with regular class hours may be excused from the classes they miss if certain conditions are met. However, the very nature of some classroom activities will not allow makeups even if the absence is excused. When a class and an approved enrichment activity create a time conflict, students may choose to attend the enrichment activity or to attend classes on the day of an enrichment activity.

To determine the impact of missing class to participate in enrichment activities, refer to your course syllabus for the attendance policy of each professor. Before missing class, students are required to visit

with faculty about coursework they will miss. It is the student's responsibility to obtain assignments prior to the arranged absence. The student needs to inform faculty at least one week in advance before their absence. Faculty is encouraged to accommodate the needs of students participating in college sponsored enrichment activities. At the discretion of the instructor, permission may or may not be given to make up missed class work and/or tests.

When faculty plan enrichment activities which may take a student out of a regularly scheduled class, faculty are responsible for alerting the campus, generally via email, to identify which students will be participating in the enrichment activity. If some students don't attend on the day of the activity, it's the responsibility of the faculty member to alert other faculty about this lack of attendance in a timely manner.

Absence for Illness

Students with a contagious disease should not attend class. Students with serious illnesses will be excused from class activities after appropriate documentation is conveyed to faculty. When students are well enough to attend class, they should do so. Students are encouraged to discuss makeup procedures with faculty as soon as possible after the onset of the illness.

The Curtis Medical Center is available to NCTA students for the evaluation and treatment of illness. When scheduling appointments at the Curtis Medical Center, avoid scheduling a visit during a time which conflicts with your class schedule. If a visit to the Curtis Medical Center must be scheduled at a time that conflicts with class, students should secure a note from the Medical Center and deliver that note to faculty teaching the missed class. NCTA Student Attendance Policy July 2016

Impact of Absence on Financial Aid

Missing class can affect financial aid. When students stop attending classes at NCTA, federal regulations require that the Office of Student Services and Financial Aid determine the last day of attendance for all students who do not officially withdraw from the college. If the last date of attendance is not reported for each student, the law stipulates that mid-point for that semester be used as the drop

date, which could result in a substantial financial aid repayment penalty for the student.

Leave of Absence

For unusual circumstances, a temporary leave of absence may be obtained. To receive authorization for a leave of absence due to illness, students will need to secure a written statement from the doctor as supporting documentation. A leave of absence does not relieve a student from meeting all course requirements. Refer to the Leave of Absence Request form found on the Common X: NCTA FORMS/STUDENT SERVICES FORMS

Audit Registration

Students desiring to attend a course without taking examinations or receiving credit for the course may register in an audit status with permission of the course instructor and their advisor. Students who register for an audit course will pay all regular fees. Students may change from audit to credit or credit to audit with permission of the course instructor and their advisor only within the first week of the session.

Students auditing a course will receive no credit and a grade of AU (Audit) will be noted on the transcript for the course.

Students receiving financial aid or veteran's benefits cannot count audited courses in determining course load.

Certificate Program

The certificate programs vary in required credit hours.

All students enrolled in a certificate program must abide by NCTA's academic standards and the Standards of Progress for financial aid.

Code of Conduct

Students are expected to conduct themselves as adults and responsible law-abiding citizens at all times. Misconduct either in college or off campus may result in students being officially warned, placed on probation, suspended or asked to leave college. Misconduct off campus which brings discredit to the college will be justification for probation and/or expulsion. As part of the student's conduct, reasonable cleanliness and appropriate dress is required.

Commencement, Degrees and Certificates

An Associate of Applied Science Degree, Associate of Science Degree or Certificate is granted to students who meet all prescribed requirements. These include passing grades in each required course, having completed the minimum semester credit hours required for the major they are enrolled in, successful internship and a minimum accumulated average grade of 2.0 (C).

Students who expect to receive a degree or certificate must file an "Application for Degree" in the Office of Student Services according to the following criteria: Completing Degree requirements in:

May February 15th
 August July 1st
 December.... October 1st

All accounts must be paid in full, with no current or pending disciplinary actions and/or other necessities associated with commencement. A \$25 non-refundable degree application fee must accompany the application for the degree. The fee applies only to the term marked on the application and is not transferable to another term. Caps and gowns are purchased from the NCTA bookstore.

Course Repeats

If a student repeats a course in an effort to improve his/her level of competency, both grades will appear on the transcript, but only the grade received the second time is used in calculation of the accumulative GPA. This does not apply to courses with grades of a C (2.0) or above.

NCTA grade table:

Letter	Range	Points	Letter	Range	Points
A+	100.0 – 100.0	4.00	C+	73.3 – 76.3	2.33
A	90.0 – 99.9	4.00	C	70.0 – 73.3	2.00
A-	86.7 – 90.0	3.67	C-	66.7 – 70.0	1.67
B+	83.3 – 86.7	3.33	D+	63.3 – 66.7	1.33
B	80.0 – 83.3	3.00	D	60.0 – 63.3	1.00
B-	76.3 – 80.0	2.67	F	00.0 – 60.0	0.00

Credit Hours

The maximum credit hour load a student can take per semester is 18 hours with a maximum credit hour overload of 21 with permission from their advisor.

Credit Transfer

Incoming Students:

Those students who have had post-secondary education prior to attending the Nebraska College of Technical Agriculture may request that their transcripts be reviewed. This review is to determine if prior education may be used in meeting a student's NCTA degree requirements. In all cases, evaluations must be initiated by the student and each will be made on an individual basis. Inquiries on credit transfer are to be made to the incoming student's advisor. A minimum grade of 2.0 (C) is required on any course for which transfer credit is requested. (only credit hours, not grades are transferred) Transferred credit has no effect on a student's NCTA grade point average. The maximum number of credit hours a student may transfer to NCTA is 30.

Dean's List and Honor Roll

During the fall and spring semesters, students are honored for their academic achievements. Students with a 3.5 or above semester GPA and have completed at least 12 credit hours during the semester are eligible for the Dean's Honor Roll. Students who receive a 4.0 for the semester and have completed at least 12 credit hours during the semester are eligible for the Dean's List. Students who have an "Incomplete" on their academic record are not eligible.

Dropping a Class

During the 8-week modular semesters and/or 16-week semester, a student may drop a course on MyNCTA up until the last drop period. If the course is dropped during the first week of the session, the dropped course will not appear on the student's academic record.

If a student withdraws from a class after the first week and prior to the last drop period, a "W" will be recorded...no credit given...and the credit(s) will not

be averaged into the student's GPA. No withdrawals will be allowed after the last drop period, which is two weeks before the start of finals.

Students withdrawing from ALL classes must drop their classes on MyNCTA and complete the check-out form from the Student Services Office. The same withdrawal policy for dropping a course, as mentioned above, will be followed. A student may not withdraw from a course after the course has ended.

Financial Obligations

It is the responsibility of the student to satisfy all financial obligations to NCTA before class enrollment can be completed, prior to release of records, and upon application for a degree. All fees and other charges may be changed at any time by the Board of Regents of the University of Nebraska.

Grades

Grades of I (Incomplete), W (Withdrawal), N (No Pass, for P/NP course), AU (Audit), and P (Pass, for P/NP course) are not assigned grade points and therefore are not used in computation of a student's grade point average.

Students are given the opportunity and encouraged to discuss their grades with their Division Chair/Advisor and/or their instructors.

Grade Appeals

The NCTA Academic Council hears appeals from students on grades received within all college programs. The committee will hear such appeals, however, only after the student has followed the process listed.

- Appealed without satisfaction to the course instructor.
- Notified the Division Chair, then the Associate Dean of the circumstances and filed an appeal with each.
- The student is to provide to the Academic Council a written statement stating the grounds of the appeal. Both the student and the course instructor will be given an opportunity to present materials

to the NCTA Academic Council in the presence of each other.

- A student will have 30 days following the beginning of the next session to protest a posted grade from the previous session. If no protest is received the grade will stand. After that time any grade change will need to be approved by the Academic Council. This does not apply to Incompletes.

Grade Point Average (GPA) Computation

Grade point averages are computed for each term and accumulated for the duration of attendance. Credit hours accepted for transfer from another institution are excluded in grade average computations. Withdrawals from courses resulting in a "W" and "I" are disregarded in the grade point average computations. All grades resulting in failure ("F") are used in computing averages.

Holds/Service Indicators

Academic and administrative offices can place holds on your registration which prevent registering or changing your registration schedule. Holds are placed for a variety of reasons (academic, financial, etc.) Failure to meet a payment deadline will result in a financial hold which prevents adds for a registered student. If a hold was placed on your registration after you have registered, your registration will not be automatically cancelled. However, you will not have registration access to adjust your schedule for subsequent terms until the holds are cleared. If you have a hold you will not be able to participate in extra-curricular activities.

Honor Graduates

Graduating students who have shown outstanding performance and dedication in their academics are honored with the following distinctions.

Cum Laude – 3.50-3.74

Magna Cum Laude – 3.75-3.99

Suma Cum Laude – 4.00

Incomplete (“I”) Courses

When unusual circumstances beyond the student’s control, e.g., serious illness, etc., prevent the student from completing course requirements, the instructor should be notified as soon as possible during the semester. In such cases, the instructor may award the student an incomplete (“I”) instead of a final grade at the end of the session/semester. The “I” is recorded on the student’s grade report and transcript.

The student will be given one full semester to change a grade of incomplete (I) to a completed grade. This time interval may be shortened by the instructor. Any incomplete not completed by the end of the makeup semester will convert to failure (“F”) on the student’s grade report and will remain permanently on the student’s transcript.

Learning Communities

Learning Communities is a course designed to increase the student’s success in college by assisting in obtaining skills necessary to reach educational objectives.

Learning Communities is required for all incoming students unless a similar course is transferred from another college or the student has taken 24 or more credit hours (from another college) and has a CGPA of 2.0 or higher, or at the discretion of the instructor in special cases.

Pass/No Pass Policy

All courses at NCTA are graded by letter, score, or percentage except for:

- Internships because there is no instructor to determine a score; internships are also not structured like courses.
- Developmental courses, because they are used to develop skills in preparation for courses that are applied to degrees.
- The S.T.A.R.S. course work is not designed to warrant a score. Students do not have the opportunity to choose whether a class is graded or pass/no pass.

Student Eligibility

Students who participate in the following must meet the group’s eligibility rules:

1. Members of Student Senate and Student Ambassadors
2. Students involved in extracurricular activities where they will be absent from class
3. Club Officers
4. All competitive and extracurricular activities
 - Ineligible students will be allowed to practice with their respective teams
 - Ineligible students will not be allowed to travel or suit up with the team

Standards of Eligibility

Students must maintain a minimum 2.0 GPA for each semester and be enrolled a minimum of 12 credit hours per semester.

Student Status

Weeks/Session	16	8
Full Time (credit hours)	12	6
$\frac{3}{4}$ Time (credit hours)	9	4.5
$\frac{1}{2}$ Time (credit hours)	6	3

Withdrawal from NCTA

Withdrawal from college will be handled the same as a class withdrawal. Each course the student is enrolled in will be handled separately. Students will be charged tuition in accordance with the college refund policy. Failure to officially withdraw from College will result in a grade failure (“F”) for all registered classes. Students, after withdrawing from class, must fill out the checkout form from the Registrar’s Office. Students are responsible for dropping their classes on MyNCTA. Student ID cards and UNL football tickets (if applicable), must be turned in at the time of checkout.

STUDENT ACTIVITIES AND ORGANIZATIONS

Aggie Rodeo Association

All students on campus have the opportunity to become active members of the Aggie Rodeo Association. The purpose of the Association is to support the College Rodeo Team, as well as, participate in and attend livestock shows, and roping club events.

Aggie Rodeo Association members, who join the National Inter-Collegiate Rodeo Association, are eligible to become NCTA College Rodeo Team members and compete with the team in the NIRA Great Plains Region.

Business Club

Membership in the Business Club is offered to all NCTA students with an interest in business, regardless of their major. Through such means as guest speakers and business visitation, the Business Club promotes an increased awareness of business activities in our economy and offers students the opportunity to establish a network of business contacts with area business. Further, the Business Club promotes enhanced communications among students interested in agriculture business.

Churches in Our Community

- + Berean Fundamental Church
- + Christian Church (Maywood)
- + First United Methodist Church
- + St. James Catholic Church
- + St. John's Lutheran Church
- + United Church of Christ (Maywood)
- + Vineyard Christian Fellowship

Collegiate Cattlemen

Affiliated with the Nebraska Cattlemen, Nebraska Cattlewomen, and the National Cattlemen's Beef Association, this organization's mission is to alert members of current beef industry related issues.



Want to learn more? Check out NCTA's YouTube Channel for informational videos on numerous subjects.

NCTA YouTube Channel

Beef industry leaders are invited to speak at meetings. Members tour area beef facilities and attend the Nebraska Cattlemen's Association Convention.

Collegiate FFA

NCTA made history in the spring of 2005 when 27 students voted to pass a charter to form the first and only Collegiate FFA chapter in the state of Nebraska. The club has an extensive program of activities including plans to work with local high school chapters with activities, help those students fill out proficiencies and state degrees, work on fundraising for the new NCTA dorms, help with workshops at Chapter Officer Leadership Training, coordinate pre-state practice contests for local chapters and much more. Collegiate FFA allows members opportunities for professional growth, leadership development and service through a national website, travel opportunities and local projects.

Collegiate 4-H Club

This club provides an opportunity for all students to continue their interest in 4-H activities by not only helping the local 4-H clubs, and assisting at the county fair but also in attending regional college 4-H meetings and expanding leadership skills.

Dances

Sponsored dances are held on campus each month. Admission may be required. All dances are to be concluded at 12 midnight.

Farm Bureau Club

The Farm Bureau Club at NCTA is for any student interested in agriculture. The primary goal of the club is to educate students on the important issues facing agriculture in Nebraska and the U.S. Students are also exposed to process of developing agricultural

policy and the role of Farm Bureau in the policy development process. Club activities include: guest speakers that highlight issues that are important to farmers and ranchers; field trips to learn more about the agricultural industry in Nebraska; and attending annual Nebraska Farm Bureau meeting each December and the Young Farmers and Ranchers conference each January. The club is supported by Nebraska Farm Bureau.

Horticulture Club

Students enrolled in the Horticulture Systems major are members of the Horticulture Club, however, any student enrolled at NCTA is welcome to join. Activities include a winter plant sale, a spring vegetable and annual sale, campus landscaping projects, and potential for-hire landscaping projects. These fundraising activities help pay for students to attend professional meetings, seminars, and workshops. Horticulture Club also participates in PLANET Student Career Days each spring.

Intercollegiate Livestock Judging

NCTA is committed to excellence in the area of collegiate livestock judging. For those students interested in allocating the time and effort necessary for successful completion of this program, the benefits by far exceed knowledge acquired in form to function analysis of livestock. Leaders in the institution and livestock industry are aware this program is the most thorough training in the decision making process educators in any field have developed. Additional personal enhancement benefits developed in this program include commitment, self-confidence, perseverance, concentration and mental toughness, teamwork, and communications skills. As a result students completing this program are better prepared to meet life's challenges and are highly sought after by employers. Additionally, the educational benefit of traveling, interacting with producers of quality livestock, and competing in national contests provide students with valuable information and knowledge not always available in classroom settings. This program is available to any full time NCTA student and

all highly motivated individuals are encouraged to enroll in the program.

Phi Theta Kappa

Phi Theta Kappa is an honorary society whose purpose is that academic excellence among community and junior college students may be nurtured; that opportunity may be provided for leadership training; that an intellectual climate may be promoted for an interchange of ideas and ideals; and that scholars may be imbued with desire for continuing education. Membership is earned by qualifications, honor, and service.

Ranch Horse Team

Ranch Horse Team is affiliated with American Stock Horse Association (ASHA). ASHA has a collegiate division with a College National Finals and has a strong commitment to education. There are 25 colleges and universities in the association with more joining every day. NCTA was one of the original founding institutions of ASHA Collegiate Division. ASHA has 3 different rider skill levels so that each individual is competing against their own skill level whether you are a beginning rider or an accomplished rider. Most shows start with a training session. NCTA competes in approximately 8 shows a year, mostly in the spring. Besides showing horses, team members go through various horse training workshops to improve your skills in showing horses. Students do not need to have a horse or show horses to join the team.

Residence Hall Council

All students who reside on campus are members of the Residence Hall Association (RHC). RHC is the representative governing body for the residence halls. RHC strives to promote a positive on-campus living environment through residence hall programming; supporting and sponsoring programs and events between residence halls and campus organizations; addressing issues and concerns that affect residence hall life.

Safari Club

Safari Club is offered to any NCTA student and is intended for those students with an exotic animal, wildlife or ecological interest. With the guidance of the instructor, students plan an educational trip to learn more about exotic animals. Prior to this trip, the "safari" students set educational goals and compile research pertinent to their trip. A presentation, open to the public, is developed following the experience. There is limited enrollment.

Student Senate

The purpose of the Student Senate is to promote unity, harmony, and fellowship between students, campus organizations, faculty, staff, and college administration. Regular meetings are held the first and third Tuesday of each month and special meetings are called when necessary. At meetings, Student Senate members discuss topics of concern. All campus activities are coordinated through the Student Senate. The Student Senate makes suggestions to improve student life on campus.

STVMA (Student Technicians of Veterinary Medicine Association) (Vet Tech Club)

STVMA is a student run organization designed to help students prepare for active participation in state and national technician organizations. As a member of STVMA, students will enjoy social, educational, and community service activities.

Women in Ag

NCTA Women in Ag is open to all first and second year students in any major. The purpose of this organization is to promote women in agriculturally oriented areas of study and ag-related jobs upon graduation. Members have the opportunity to attend the Women in Ag Conference held in Kearney. Guest speakers will present information of various topics ranging from personal and social issues to professional interests.

GENERAL EDUCATION

DIVISION CHAIR:

Eric Reed, Associate Professor

FACULTY:

Tee Bush, Associate Professor

MISSION

The mission of the General Education Division is to provide broad intellectual knowledge, awareness, and critical thinking skills in the liberal arts, humanities, and natural and social sciences directed toward the successful pursuit of students' personal and career goals as citizens and leaders in agriculture enterprises.



PHILOSOPHY

General education is part of the academic experience that builds students' growth as citizens and professionals. General education instruction engages students in independent, critical, and creative thinking; promotes open-mindedness and understanding; gives confidence and inquisitiveness to challenge assumptions and explore ideas and values; promotes the passing of sound judgment; encourages the consideration of ethical and practical consequences of actions; and facilitates wisdom.

ASSOCIATE OF APPLIED SCIENCE DEGREE

OUTCOMES: Upon completion of the Associate of Applied Science degree students should be able to demonstrate the following skills and abilities (as defined by the Association of American Colleges & Universities VALUE Rubrics):

PROGRAM OUTCOMES:

1. Written Communication.

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies,

and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

2. **Oral Communication.** Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.
3. **Quantitative Literacy.** Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a “habit of mind,” competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).
4. **Problem Solving.** Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal.
5. **Civic Engagement:** Civic engagement is “working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes.” (Excerpted from *Civic Responsibility and Higher Education*, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community.
6. **Critical Thinking:** Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

- 7. Information Literacy:** The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. - Adopted from the National Forum on Information Literacy.

GENERAL EDUCATION COURSES

Required for Associate of Applied Science Degree

(20-22 Credit Hours Required)

+ WRITTEN COMMUNICATION & CRITICAL THINKING (3 hours required)

ENG 1503 Business & Technical Writing .. 3 credits
ENG 1903 College Composition 3 credits

Total 3

+ ORAL COMMUNICATION (3-5 hours required)

SPA 1115 Beginning Spanish I 5 credits
SPC 1103 Sales Communication 3 credits
SPC 1113 Speech 3 credits

Total 3-5

+ QUANTITATIVE LITERACY (3 hours required)

MTH 1203 Intermediate Algebra 3 credits
MTH 1403 Agricultural Math 3 credits
MTH 1503 College Algebra 3 credits
MTH 2203 Elements of Statistics 3 credits
MTH 2253 Trigonometry 3 credits
VTS 1313 Math for Vet Techs 3 credits

Total 3

+ PROBLEM SOLVING (6 hours required)

Take all of the following

Computers

AIT 1003 Software Productivity 3 credits

Take one of the following

Life Sciences

ASI 1024 Fundamentals of Animal Biology 4 credits

BIO 1104 General Biology 4 credits

BIO 1313 Plant Science and 3 credits

BIO 1321 Plant Science Lab or 1 credit

BIO 1331 Horticulture Science Lab 1 credit

Physical Sciences

CHM 1014 Intro to Chemistry I 4 credits

CHM 1024 Intro to Chemistry II 4 credits

CHM 1104 General Chemistry 4 credits

Total 7

+ CIVIC ENGAGEMENT & INFORMATION LITERACY (4 hours required)

Take all of the following

PSY 1011 Learning Communities 1 credit

Take one of the following

AED 1023 Interpersonal Skills for Leadership 3 credits

PSY 1103 Human Relations 3 credits

Total 4



ASSOCIATE OF SCIENCE DEGREE

OUTCOMES: Upon completion of the Associate of Science degree students should be able to demonstrate the following skills and abilities (as defined by the Association of American Colleges & Universities VALUE Rubrics):

PROGRAM OUTCOMES:

1. **Written Communication.** Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.
2. **Oral Communication.** Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.
3. **Quantitative Literacy.** Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a “habit of mind,” competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).
4. **Problem Solving.** Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal.
5. **Civic Engagement:** Civic engagement is “working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes.” (Excerpted from *Civic Responsibility and Higher Education*, edited by

Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community.

6. **Critical Thinking.** Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
7. **Information Literacy.** The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. - Adopted from the National Forum on Information Literacy.



GENERAL EDUCATION COURSES

Required for Associate of Science Degree

(27-29 Credit Hours Required)

+ WRITTEN COMMUNICATION & CRITICAL THINKING (6 hours required)

ENG 1903 College Composition 3 credits

ENG 2203 Advanced Composition 3 credits

Total 6

+ ORAL COMMUNICATION (3-5 hours required)

SPA 1115 Beginning Spanish I 5 credits

SPC 1103 Sales Communication 3 credits

SPC 1113 Speech 3 credits

Total 3-5

+ QUANTITATIVE LITERACY (3 hours required)

MTH 1503 College Algebra 3 credits

MTH 2203 Elements of Statistics 3 credits

MTH 2253 Trigonometry 3 credits

Total 3



+ PROBLEM SOLVING (11 hours required)

Take all of the following

Computers

AIT 1083 Software Productivity 3 credits

Take one of the following

Life Sciences

ASI 1024 Fundamentals Of Animal Biology 4 credits

BIO 1104 General Biology 4 credits

BIO 1313 Plant Science and 3 credits

BIO 1321 Plant Science Lab or 1 credit

BIO 1331 Horticulture Science Lab 1 credit

Take all of the following

Physical Sciences

CHM 1014 Intro to Chemistry I 4 credits

CHM 1024 Intro to Chemistry II 4 credits

CHM 1104 General Chemistry 4 credits

Total 11

+ CIVIC ENGAGEMENT & INFORMATION LITERACY (4 hours required)

Take all of the following

PSY 1011 Learning Communities 1 credit

Take one of the following

AED 1023 Interpersonal Skills for Leadership 3 credits

PSY 1103 Human Relations 3 credits

Total 4

Discover
Your Way
at NCTA

AGRIBUSINESS MANAGEMENT SYSTEMS

The Agribusiness Management Systems major supports the college mission by striving to develop students into competent citizens through general education and promoting involvement, innovation, and individuality in the agribusiness industry.

DIVISION CHAIR:

Mary Rittenhouse, Assistant Professor

FACULTY:

Jeremy Sievers, Assistant Professor

ASSOCIATE OF APPLIED SCIENCE OPTIONS

- + Management Option
- + Plus One

ASSOCIATE OF SCIENCE OPTIONS (TRANSFER)

- + Baccalaureate Transfer Option
- + Minor
- + Certificate

PROGRAM OUTCOMES:

1. AMS students will be able to demonstrate computer skills.
2. AMS students will be able to apply economic information to real world situations.
3. AMS students will be able to think critically and demonstrate problem-solving skills.
4. AMS students will be able to read, comprehend, and analyze basic financial statements and demonstrate basic accounting skills.
5. AMS students will be able to effectively communicate in both an oral and written format.
6. AMS students will be able to demonstrate skills enabling them to work effectively as individuals and in groups.

Career Opportunities:

Agribusiness Management graduates are pursuing careers in agriculture finance and at farm cooperatives; as office managers in various agricultural companies and are partners or owners of production agriculture businesses and as small main street business owners.

Internship:

An internship will be required for completion of the Agribusiness Management Systems Program. The internship will be a 4 credit hour course and should include 8 weeks of on-site training in an area of interest for the student.

Capstone:

Entrepreneurship (ABM 2903) serves as the AMS capstone course. Entrepreneurship students complete a business plan for a small business or value added enterprise based on marketing and financial feasibility studies.

AGRIBUSINESS MANAGEMENT SYSTEMS CORE COURSES

The following courses are required for all Associate of Applied Science degree options of the Agribusiness Management Systems major.

ABM 1803 Business Statistics <u>or</u>	
MTH 1503 College Algebra	3 credits
ABM 2003 Critical Thinking	3 credits
ABM 2004 Internship	4 credits
ABM 2911 Seminar.....	1 credit
ACT 1103 Accounting I.....	3 credits
ECN 1203 Microeconomics	3 credits
MGT 2103 Management Concepts	3 credits

Total 20

MANAGEMENT OPTION

Associate of Applied Science

Associate of Applied Science Core.....20-22

Agribusiness Mgt. Systems Core..... 20

+ Management Option Courses

ABM 1803 Business Statistics..... 3 credits

ABM 2403 Ag. Finance 3 credits

ABM 2503 Ag. Decision Analysis 3 credits

ABM 2854 Farm and Ranch Mgt. 4 credits

ABM 2903 Entrepreneurship 3 credits

ACT 1203 Accounting II..... 3 credits

AIT 1073 Intro to Databases..... 3 credits

ECN 1303 Macroeconomics 3 credits

MGT 2503 Human Resource Mgt..... 3 credits

MKT 2203 Ag. Marketing..... 3 credits

Electives (AMS) (not already taken)..... 3 credits

choose from below:

ABM 1403 Econ of World Food 3 credits

ABM 2103 Personal Finance 3 credits

ABM 2963 Farm, Ranch & Small
Business Recordkeeping 3 credits

AIT 1083 Desktop Publishing/
Web Design 3 credits

MKT 2103 Retail Marketing..... 3 credits

Total 34

Total Credit Hours for Degree 74-76

Suggested Sequence of Study

+ First Semester (Fall)

ABM 1803 Business Statistics..... 3 credits

ACT 1103 Accounting I..... 3 credits

AIT 1073 Intro to Databases..... 3 credits

ECN 1203 Microeconomics..... 3 credits

English 3 credits

PSY 1011 Learning Communities* 1 credit

Total 16

+ Second Semester (Spring)

ACT 1203 Accounting II..... 3 credits

AED 1023 Interpersonal Skills 3 credits

AIT 1003 Software Productivity 3 credits

MTH 1503 College Algebra 3 credits

Sciences 4 credits

Total 16

+ Summer

ABM 2004 Internship..... 4 credits

Total 4

+ Third Semester (Fall)

ABM 2403 Ag. Finance 3 credits

ABM 2854 Farm and Ranch Mgt. 4 credits

ABM 2911 Seminar..... 1 credit

MGT 2013 Management Concepts. 3 credits

SPC 1103 Sales Communication. 3 credits

Electives 3 credits

Total 17

+ Fourth Semester (Spring)

ABM 2003 Critical Thinking 3 credits

ABM 2503 Ag. Decision Analysis 3 credits

ABM 2903 Entrepreneurship 3 credits

ECN 1303 Macroeconomics..... 3 credits

MGT 2503 Human Resource Mgmt..... 3 credits

MKT 2203 Ag. Marketing..... 3 credits

Total 18

PLUS ONE OPTION

Associate of Applied Science

+ AMS Required Courses

ABM 2003 Critical Thinking	3 credits
ABM 2103 Personal Finance	3 credits
ABM 2403 Ag. Finance	3 credits
ABM 2503 Ag. Decision Analysis	3 credits
ABM 2903 Entrepreneurship	3 credits
ABM 2963 Farm, Ranch, and Small Business Recordkeeping	3 credits
ACT 1103 Accounting I.....	3 credits
ACT 1203 Accounting II.....	3 credits
ECN 1203 Microeconomics.....	3 credits
ECN 1303 Macroeconomics.....	3 credits
MGT 2103 Management Concepts	3 credits
MGT 2503 Human Resource Mgt.	3 credits

Total 36

****If up to two of the courses above have previously been completed, then select replacement course(s) from the following (up to two courses):**

ABM 1803 Business Statistics.....	3 credits
ABM 2854 Farm & Ranch Management.	4 credits
AIT 1073 Intro to Data Base	3 credits
AIT 1083 Desktop Publishing and Web Design	3 credits
MKT 2103 Retail Marketing.....	3 credits
MGT 2203 Ag Marketing	3 credits

Suggested Sequence of Study

+ First Semester (Fall)

ABM 2403 Ag. Finance	3 credits
ABM 2963 Farm, Ranch, and Small Business Recordkeeping	3 credits
ACT 1103 Accounting I.....	3 credits
ECN 1203 Microeconomics.....	3 credits
MGT 2103 Management Concepts	3 credits
MGT 2503 Human Resource Mgt.....	3 credits

Total 18

+ Second Semester (Spring)

ABM 2003 Critical Thinking	3 credits
ABM 2103 Personal Finance	3 credits
ABM 2503 Ag. Decision Analysis	3 credits
ABM 2903 Entrepreneurship	3 credits
ACT 1203 Accounting II.....	3 credits
ECN 1303 Macroeconomics.....	3 credits

Total 18

Total Credit Hours for Degree 36



TRANSFER OPTION

Associate of Science

Associate of Science Core.....27-29

AMS Required Courses

ABM 1803 Business Statistics.....	3 credits
ABM 2403 Ag Finance	3 credits
ABM 2903 Entrepreneurship	3 credits
ACT 1103 Accounting I.....	3 credits
ACT 1203 Accounting II.....	3 credits
ECN 1203 Microeconomics.....	3 credits
ECN 1303 Macroeconomics.....	3 credits
MGT 2103 Management Concepts	3 credits
MKT 2203 Ag. Marketing.....	3 credits

Total 27

Select 12 hours from the following or by Advisor approval

(At least six must be AMS courses)

ABM 2004 Internship	4 credits
ABM 2854 Farm and Ranch Mgt.	4 credits
AGR 1103 Crop Science	3 credits
AGR 2404 Crop Management.....	4 credits
ASI 1303 Animal Management	3 credits
ASI 2303 Range Management.....	3 credits
ASI 2513 Meat Science	3 credits
MGT 2503 Human Resource Mgt.....	3 credits
MKT 2103 Retail Marketing.....	3 credits

Total 12

Total Credit Hours for Degree 66-68

Suggested Sequence of Study

+ First Semester (Fall)

ABM 1803 Business Statistics.....	3 credits
ACT 1103 Accounting I.....	3 credits
ECN 1203 Microeconomics.....	3 credits
ENG 1903 College Composition.....	3 credits
PSY 1011 Learning Communities.....	1 credit
Science	4 credits

Total 17

+ Second Semester (Spring)

ACT 1203 Accounting II.....	3 credits
AED 1023 Interpersonal Skills	3 credits
AIT 1003 Software Productivity	3 credits
ENG 2203 Advanced Composition.....	3 credits
MTH 1503 College Algebra	3 credits

Total 15

+ Third Semester (Fall)

ABM 2403 Ag. Finance	3 credits
MGT 2013 Management Concepts	3 credits
SPC 1103 Sales Communications.....	3 credits
Electives	6 credits

Total 15

Fourth Semester (Spring)

ABM 2903 Entrepreneurship	3 credits
ECN 1303 Macroeconomics.....	3 credits
MKT 2203 Ag Marketing.....	3 credits
Science	4 credits
Electives	6 credits

Total 19

MINOR

Required AMS Minor Courses

ABM 2103	Personal Finance.....	3 credits
ABM 2963	Farm, Ranch, and Small Business Recordkeeping or	
ACT 1103	Accounting I	3 credits
ECN 1203	Microeconomics.....	3 credits
MGT 2103	Management Concepts.....	3 credits

Total 12

As well as 12 additional hours of Agribusiness Management Courses

(Nine must be 2000 level courses)

ABM 2003	Critical Thinking	3 credits
ABM 2403	Ag. Finance	3 credits
ABM 2503	Ag. Decision Analysis	3 credits
ABM 2854	Farm and Ranch Mgt.	4 credits
ABM 2903	Entrepreneurship	3 credits
ACT 1203	Accounting II.....	3 credits
ECN 1303	Macroeconomics.....	3 credits
ECN 1403	Economics of World Food and Agriculture.....	3 credits
MGT 2503	Human Resource Mgt.....	3 credits
MKT 2103	Retail Marketing.....	3 credits
MKT 2203	Ag. Marketing.....	3 credits
SPC 1103	Sales Communication	3 credits

Total 12

Total Credit Hours for Minor 24

CERTIFICATE

AMS Certificate Core Courses

(Select 6 Hours)

ABM 2103	Personal Finance	3 credits
ENG 1503	Business and Technical Writing or	
ENG 1903	College Composition	3 credits
PSY 1103	Human Relations	3 credits
SPC 1103	Sales Communication or	
SPC 1113	Speech	3 credits

Total 12

Additional AMS Courses

(Select 21 Hours)

ABM 2003	Critical Thinking	3 credits
ABM 2403	Ag. Finance	3 credits
ABM 2503	Ag. Decision Analysis	3 credits
ABM 2854	Farm and Ranch Mgt.	4 credits
ABM 2903	Entrepreneurship	3 credits
ABM 2963	Farm, Ranch, and Small Business Recordkeeping	3 credits
ACT 1103	Accounting I.....	3 credits
ACT 1203	Accounting II.....	3 credits
ECN 1203	Microeconomics.....	3 credits
ECN 1303	Macroeconomics.....	3 credits
ECN 1403	Economics of World Food and Agriculture	3 credits
MGT 2503	Human Resource Mgt.....	3 credits
MGT 2103	Management Concepts	3 credits
MKT 2103	Retail Marketing.....	3 credits
MKT 2203	Ag. Marketing.....	3 credits

Total 21

Total Credit Hours for Certificate 30

APS ANIMAL SCIENCE/AG EDUCATION

DIVISION CHAIR

Dr. Doug Smith, Assistant Professor

FACULTY

Terri Jo Bek, Professor

Joanna Hergenreder, Assistant Professor

MISSION

The APS Animal Science/Ag Ed division is dedicated to the development of innovative individuals for the equine and livestock industry.

The APS Animal Science/Ag Ed major prepares students for lifelong careers in agriculture and its allied industries. Graduates of this major gain technical knowledge necessary for success in agriculture and obtain the necessary skills for lifelong learning and community leadership.

ASSOCIATE OF APPLIED SCIENCE OPTIONS

- + Equine Industry Management
- + Livestock Industry Management

BACHELOR OF APPLIED SCIENCE DEGREE

2+2 Transfer Association of Science degree from Nebraska College of Technical Agriculture and Bachelor of Applied Science Degree from University of Nebraska-Lincoln (UNL)

Online bachelor's degree completion option

ASSOCIATE OF SCIENCE OPTIONS (TRANSFER)

- + Agriculture Education/Extension
- + Animal Science
- + Grazing Livestock Systems

MINOR

- + Agriculture Production Systems

CERTIFICATE

- + Beef Production
- + Equine Training Management

FARM/RANCH OWNERSHIP PROGRAMS

This program is designed to assist students in obtaining their own ranch operation. The outcome of this program is a beginning ranch loan application.

100 Beef Cow Ownership Advantage Program

- Enroll in the Livestock Industry Management or Equine Industry Management Option
- Additional required courses:
 - AGR 1001 Ownership Advantage Seminar I
 - AGR 1501 Ownership Advantage Seminar II
 - AGR 2001 Ownership Advantage Seminar III



Discover
Your Way
at NCTA

PROGRAM OUTCOMES:

1. Students will be able to effectively communicate in oral and written form.
2. Students will be able to gather, assimilate and process information to reach sound logical conclusions.
3. Students will be able to apply economic principles of accounting, marketing and budgeting to agricultural enterprises.
4. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study.
5. Learning outcomes specific to livestock area options (Livestock Industry Management and Equine Industry Management).
 - Students will be knowledgeable in the areas of modern livestock husbandry and management practices.
6. Learning outcomes specific to transfer options.
 - Students will demonstrate a basic knowledge in the areas of biology, chemistry, mathematics, and oral/written communication along with a basic understanding of agriculture consistent with standards set for baccalaureate degrees.

INTERNSHIP:

Students within the APS Animal Science/Ag Ed major complete a 12 week internship working full-time in the agriculture industry. Students are permitted to complete their internship after completing a minimum of 3 eight week instructional periods with a minimum 2.0CGPA.

AG PRODUCTION SYSTEMS CORE COURSES

The following courses are required for all Associate of Applied Science degree options of the Ag Production Systems major.

ABM 2903	Entrepreneurship <u>or</u>	
AGR 2943	APS Capstone	3 credits
ABM 2963	Farm Records <u>or</u>	
ACT 1103	Accounting I.....	3 credits
ASI 2854	Farm and Ranch Mgmt.....	4 credits
ASI 2906	Internship	6 credits
ECN 1103	Intro to Ag Economics <u>or</u>	
ECN 1203	Microeconomics.....	3 credits

Total 19

EQUINE INDUSTRY MANAGEMENT

Learning outcomes specific to Livestock Industry Management and Equine Industry Management Options.

- + Students will be knowledgeable in the areas of modern livestock husbandry and management practices.

Associate of Applied Science Core.....	20-22
Ag Production Systems Core	19
Equine Industry Core.....	26

ASI 1011	Introduction to Animal Science.....	1 credit
ASI 1253	Nutrition	3 credits
ASI 1263	Basic Equitation (P).....	3 credits
ASI 1303	Animal Management	3 credits
ASI 1432	Equine Care	2 credits
ASI 1442	Equine Practicum I.....	2 credits
ASI 1501	Equine Safety	1 credit
ASI 2203	Feeds & Feeding (P)	3 credits
ASI 2433	Equine Industry Management I.....	3 credits
ASI 2442	Equine Practicum II.....	2 credits
ASI 2443	Equine Industry Management II.....	3 credits

Equine Industry Specialization Focus

Course (Select 7 hours)

ASI 2313	Ration Formulation (P)	3 credits
ASI 2362	Advanced Equitation (P)	2 credits
ASI 2363	Intermediate Training.....	3 credits
ASI 2463	Advanced Performance Training.....	3 credits
ASI 2384	Large Animal Diseases & Pharmacology (P) <u>or</u>	4 credits
ASI 2412	Equine Marketing Techniques.	2 credits
ASI 2462	Colt Starting	2 credits
ASI 2604	Livestock Anatomy and Physiology <u>or</u>	4 credits
ASI 2612	Equine Reproduction	2 credits
MGT 2103	Management Concepts.....	3 credits
MKT 2103	Retail Marketing.....	3 credits
VTS 1404	Anatomy and Physiology	4 credits

Total Credit Hours for Degree 76

Suggested Sequence of Study

+ First Semester

ASI 1263	Basic Equitation**	3 credits
ASI 1011	Intro. To Animal Science	1 credit
ASI 1253	Nutrition	3 credits
ASI 1303	Animal Management	3 credits
ASI 1442	Equine Practicum I.....	2 credits
ASI 1501	Equine Safety	1 credit
ECN 1103	Intro to Ag Economics <u>or</u>	
ECN 1203	Microeconomics.....	3 credits
PSY 1011	Learning Communities*	1 credit

Total 17

+ Second Semester (Spring)

ABM 2963	Farm Records <u>or</u>	
ACT 1103	Accounting	3 credits
AED 1023	Interpersonal Skills for Leadership.....	3 credits
AIT 1003	Software Productivity	3 credits
ASI 1024	Fundamentals of Animal Biology <u>or</u>	
BIO 1104	General Biology.....	4 credits
ASI 1432	Equine Care	2 credits

ASI 2203	Feeds & Feeding (P)	3 credits
SPC 1103	Sales Communications <u>or</u>	
SPC 1113	Speech	3 credits

Total 18

+ First Summer

ASI 2906	Internship	6 credits
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Total 6

+ Third Semester (Fall)

ASI 2353	Livestock Breeding <u>or</u>	3 credits
ASI 2362	Advanced Equitation <u>or</u>	2 credits
ASI 2384	Large Animal Diseases & Pharmacology <u>or</u>	4 credits
ASI 2412	Equine Marketing Techniques <u>or</u>	2 credits
ASI 2462	Colt Starting	2 credits
ASI 2433	Equine Industry Management I.....	3 credits
ASI 2442	Equine Practicum II.....	2 credits
ASI 2854	Farm & Ranch Mgmt.....	4 credits
MTH 1203	Int. Algebra <u>or</u>	
MTH 1403	Ag Math <u>or</u>	
MTH 1503	College Algebra	3 credits

Total 14-18

+ Fourth Semester (Spring)

ENG 1503	Business & Technical Writing <u>or</u>	
ENG 1903	College Composition.....	3 credits
ABM 2903	Entrepreneurship <u>or</u>	
AGR 2943	APS Capstone	3 credits
AED 1023	Interpersonal Skills for Leadership.....	3 credits
ASI 2443	Equine Industry Management II.....	3 credits
ASI 2462	Colt Starting <u>or</u>	
ASI 2612	Equine Reproduction	2 credits

Total 14-18

Total Credit Hours for Degree 76

LIVESTOCK INDUSTRY MANAGEMENT

Learning outcomes specific to Livestock Industry Management and Equine Industry Management Options.

- + Students will be knowledgeable in the areas of modern livestock husbandry and management practices.

Associate of Applied Science Core.....20-22

Ag Production Systems Core 19

Livestock Industry Management Core..... 20

ASI 1011	Introduction to Animal Science .	1 credit
ASI 1203	Feedlot Operations(P) <u>or</u>	
ASI 2753	Beef Production Systems (P).	3 credits
ASI 1213	Livestock & Carcass Evaluation	3 credits
ASI 1253	Nutrition	3 credits
ASI 1303	Animal Management	3 credits
ASI 2384	Large Animal Diseases & Pharmacology (P)	4 credits
MKT 2203	Ag Marketing	3 credits
Livestock Industry Specialization (Select 11)		
.....		11 credits
ABM 2403	Finance (P)	3 credits
ABM 2903	Entrepreneurship (P)	3 credits
ACT 1203	Accounting II (P)	3 credits
AEQ 1153	Equipment Principles	3 credits
AEQ 2303	Equipment Preventative Maintenance	3 credits
AGR 2383	Irrigation Management	3 credits
ASI 1222	Advanced Livestock Evaluation & Judging (P)	2 credits
ASI 1312	Livestock Judging I (P)	2 credits
ASI 1351	Artificial Insemination of Beef Cattle	1 credit
ASI 1432	Equine Care	2 credits
ASI 2203	Feeds and Feeding (P)	3 credits
ASI 2303	Range Management	3 credits
ASI 2312	Livestock Judging II (P)	2 credits
ASI 2313	Ration Formulation (P)	3 credits
ASI 2353	Livestock Breeding	3 credits

ASI 2403	Monitoring Techniques & Data Analysis	3 credits
ASI 2412	Equine Marketing Techniques.....	2 credits
ASI 2452	Seedstock Preparation and Marketing.....	2 credits
ASI 2513	Meat Science (P).....	3 credits
ASI 2604	Livestock Anatomy & Physiology <u>or</u>	
VTS 1404	Anatomy and Physiology	4 credits
ASI 2773	Advanced Reproductive Physiology.....	3 credits
MGT 2103	Management Concepts	3 credits
MGT 2503	Human Resource Management (P)	3 credits

Total Credit Hours for Degree 75

SPRING INTERNSHIP ASSOCIATE OF APPLIED SCIENCE

Suggested Sequence of Study

+ First Semester (Fall)

AIT 1003	Software Productivity	3 credits
ASI 1011	Intro To Animal Science	1 credit
ASI 1213	Livestock and Carcass Evaluation	3 credits
ASI1253	Nutrition	3 credits
ASI 1303	Animal Management	3 credits
ECN 1103	Intro to Ag Economics <u>or</u>	
ECN 1203	Microeconomics	3 credits
MTH 1203	Int. Algebra <u>or</u>	
MTH 1403	Ag Math <u>or</u>	
MTH 1503	College Algebra	3 credits
PSY 1011	Learning Communities*	1 credit

Total 20

+ Second Semester (Spring)

AED 1023	Interpersonal Skills for Leadership.....	3 credits
ASI 1024	Fundamentals of Animal Biology	4 credits
ASI 2203	Feeds and Feeding	3 credits
ASI 2906	Internship	6 credits
SPC 1103	Sales Communications.....	3 credits

Total 19

+ Third Semester (Fall)

ABM 2963	Farm Records <u>or</u>	
ACT 1103	Accounting	3 credits
ASI 2303	Range Management**	3 credits
ASI 2312	Livestock Judging II**	2 credits
ASI 2353	Livestock Breeding**	3 credits
ASI 2384	Large Animal Diseases	4 credits
ASI 2604	Livestock Anatomy & Physiology**	4 credits
ASI 2854	Farm and Ranch Management	4 credits

Total 18

+ Fourth Semester (Spring)

AGR 2943	APS Capstone	3 credits
ASI 1203	Feedlot Operations <u>or</u>	
ASI 2753	Beef Productions Systems.....	3 credits
ASI 1351	Artificial Insemination of Beef Cattle**	1 credit
ASI 1432	Equine Care**	2 credits
ASI 2313	Ration Formulation**	3 credits
ASI 2513	Meat Science**	3 credits
ASI 2773	Advanced Reproductive Physiology**	3 credits
ENG 1503	Business and Technical Writing <u>or</u>	
ENG 1903	College Composition	3 credits
MKT 2203	Ag Marketing	3 credits

Total 18

Total Credit Hours for Degree 75

** - Probable Course Choices

Livestock Management Summer Internship

Associate of Applied Science Suggested Sequence of Study

+ First Semester (Fall)

AIT 1003	Software Productivity	3 credits
ASI 1011	Intro. To Animal Science	1 credit
ASI 1213	Livestock & Carcass Eval	3 credits
ASI 1253	Nutrition	3 credits
ASI 1303	Animal Management	3 credits
ECN 1103	Intro to Ag Economics <u>or</u>	
ECN 1203	Microeconomics	3 credits
MTH 1203	Intermediate Algebra <u>or</u>	
MTH 1403	Ag Math <u>or</u>	
MTH 1503	College Algebra	3 credits
PSY 1011	Learning Communities*	1 credit

Total 18

+ Second Semester (Spring)

AED 1023	Interpersonal Skills for Leadership	3 credits
AEQ 1203	Welding**	3 credits
ASI 1312	Livestock Judging I**	2 credits
ASI 2203	Feeds and Feeding	3 credits
ASI 1024	Fundamentals of Animal Biology <u>or</u>	
BIO 1104	General Biology <u>or</u>	
CHM 1014	Intro to Chemistry I <u>or</u>	
CHM 1104	General Chemistry	4 credits
SPC 1103	Sales Communications <u>or</u>	
SPC 1113	Speech	3 credits

Total 18

+ Summer

ASI 2906	Internship	6 credits
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Total 6

+ Third Semester (Fall)

ABM 2963	Farm Records <u>or</u>	
ACT 1103	Accounting I.....	3 credits
ASI 2303	Range Management**	3 credits
ASI 2312	Livestock Judging II**	2 credits
ASI 2353	Livestock Breeding**	3 credits
ASI 2384	Large Animal Disease & Pharmacology.....	4 credits
ASI 2604	Livestock Anatomy & Physiology.....	4 credits
ASI 2854	Farm and Ranch Management.....	4 credits

Total 18

+ Fourth Semester (Spring)

AGR 2943	APS Capstone	3 credits
ASI 1203	Feedlot Operations <u>or</u>	
ASI 2753	Beef Production Systems.....	3 credits
ASI 1351	Artificial Insemination of Beef Cattle**	1 credit
ASI 1432	Equine Care**	2 credits
ASI 2313	Ration Formulation**	3 credits
ASI 2332	Livestock Judging III**	2 credits
ASI 2513	Meat Science**	3 credits
ASI 2773	Advanced Reproductive Physiology**	3 credits
ENG 1503	Business and Technical Writing <u>or</u>	
ENG 1903	College Composition	3 credits
MKT 2203	Ag Marketing	3 credits

Total 18

Total Credit Hours for Degree 75

Agriculture Production Systems Minor

Students with majors other than Agriculture Production Systems can earn a minor in Agriculture Production by meeting the requirements of their major, plus taking:

AGR 1103	Crop Science <u>or</u>	
ASI 1303	Animal Management	3 credits

Twelve (12) additional hours of Agriculture Production Systems courses must be taken. VTS 1713 Pharmacology and Anesthesiology (3) and VTS 2733 Diseases of Veterinary Medicine (3) can be used as part of the required twelve hours.

BACHELOR OF APPLIED SCIENCE DEGREE

2 + 2 Transfer Association of Science degree from Nebraska College of Technical Agriculture and Bachelor of Applied Science Degree from University of Nebraska-Lincoln (UNL)

The Applied Science degree program offers an *online bachelor's degree completion option* with flexible pathways to degrees in agriculture, environmental, and other science-focused careers.

Applied Science degree programs prepare students to be the problem solvers, innovators, and teachers for the great challenges that our world will face related to food, energy and water in our landscapes. Students have the opportunity to individualize their course choices to broaden their studies, or combine them with electives to add a minor or dual degree.

The goal of the Applied Science degrees is to provide students with the science and leadership skills necessary to expand their career options, encourage life-long learning, and enrich their personal and civic lives.

+ Year 1 – Fall – NCTA

AEQ 1203	Welding	3 credits*
AGR 2103	Building Construction	3 credits*
ASI 1011	Intro to Animal Science.....	1 credit*
BIO 1313	Plant Science.....	3 credits
BIO 1321	Agronomic Plant Science Lab	1 credit
ENG 1903	College Composition	3 credits

Total 14

+ Year 1 – Spring – NCTA

ACT 1103	Accounting I.....	3 credits*
AEQ 1153	Equipment Principles.....	3 credits*
AGR 1201	Soils Lab	1 credit
AGR 1203	Principles of Soils	3 credits
SPC 1113	Speech	3 credits

Total 13

+ Year 2 – Fall – NCTA

CHM 1004	Intro to Chemistry.....	4 credits
ECN 1203	Microeconomics.....	3 credits
HSL 1053	Landscape Appreciation.....	3 credits
HTY 1303	American History after 1877 ...	3 credits
MTH 2253	Trigonometry	3 credits

Total 16

+ Year 2 – Spring – NCTA

ABM 2903	Entrepreneurship	3 credits
ASI 2513	Meat Science	3 credits
ECN 1303	Macroeconomics.....	3 credits
ENG 2203	Advanced English Composition.....	3 credits*
MTH 2203	Elements of Statistics	3 credits

Total 15

NCTA Total Credit Hours: 58

*Transfer into University of Nebraska-Lincoln to meet the 16 hour Free Elective requirement.

Student will receive an A.S. from Nebraska College of Technical Agriculture, Curtis, Nebraska.

+ Year 3 – Fall – University of Nebraska–Lincoln

AGRO 315	Genetics.....	4 credits
ENTO/BIOS 115	Insect Science	3 credits
	Ecology	3 credits
FDST/CHEM/NUTR 131	The Science of Food	3 credits*

Total 13

+ Year 3 – Spring – University of Nebraska–Lincoln

	Food Genetics, Biotechnology & Processing Elective	3 credits
AGRI 115	Biotechnology: Food, Health and Environment.....	3 credits
	Ecology	3 credits
FDST 301	Chemistry of Food.....	3 credits
NRES 108	Earth's Natural Resource Systems.....	3 credits

Total 15

+ Year 3 – Summer – University of Nebraska–Lincoln

MSYM 109	Physical Properties in Agriculture and Life	4 credits
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Total 4

+ Year 4-Fall-University of Nebraska–Lincoln

AECN 265	Resource & Environmental Economics I.....	3 credits
VBMS 303	Principles & Prevention of Livestock Diseases	3 credits
	Food, Animal & Plant Sciences Electives .	3 credits
AECN 325	Marketing Ag Commodities ...	3 credits

Total 12

+ Year 4 – Spring – University of Nebraska–Lincoln

ACE 9	3 credits
	Ecology Elective	3 credits
AGRO 240	Forage Crops and Range Management	4 credits
AGRI 485	Investigations of Applied Science (ACE 10)	3 credits
NRES 422	Laboratory Earth: Earth's Changing Systems	3 credits

Total 16

University of Nebraska–Lincoln

Total Credit Hours: 60

Total Credit Hours to Graduate: 120

PLEASE NOTE: No more than 60 credit hours earned at a two-year college can be applied to a baccalaureate degree from UNL.

Student will receive a B.A.S. degree from University of Nebraska-Lincoln (UNL) Lincoln, Nebraska

ASSOCIATE OF SCIENCE DEGREE TRANSFER

Learning outcomes specific to APS transfer options.

- + Students will demonstrate a basic knowledge in the areas of biology, chemistry, mathematics, and oral/written communication along with a basic understanding of agriculture consistent with standards set for baccalaureate degrees.

ASSOCIATE OF SCIENCE DEGREE AGRICULTURE EDUCATION

Associate of Science Core 27-29
Agriculture Education Specialization Focus
Courses (Select 24 hours)

ABM 2003	Critical Thinking	3 credits
ACT 1103	Accounting I.....	3 credits
ACT 1203	Accounting II.....	3 credits
AED 1103	Intro to Agri Science Education	3 credits
AED 1233	Planning Leadership & Experiential Programs.....	3 credits
AED 2103	Youth Programs.....	3 credits
AED 2503	Livestock Practicum	3 credits
AEQ 1103	Small Engines	3 credits
AEQ 1203	Welding	3 credits
AGR 1201	Principles of Soils Lab.....	1 credits
AGR 1203	Principles of Soils	3 credits
AGR 2103	Building Construction	3 credits
ASI 1011	Intro to Animal Science.....	1 credit
ASI 1213	Livestock & Carcass Evaluation	3 credits
ASI 1303	Animal Management	3 credits
ASI 2513	Meat Science	3 credits
ECN 1203	Microeconomics.....	3 credits
ECN 1303	Macroeconomics.....	3 credits

Total 24

Advisor Guided Electives..... **11 credits**

Total Credit Hours for Degree 64

ASSOCIATE OF SCIENCE DEGREE ANIMAL SCIENCE

Associate of Science Core 27-29
Animal Science Specialization Focus
(Select 24 hours)

ABM 2003	Critical Thinking	3 credits
ABM 2403	Finance (P).....	3 credits
ACT 1103	Accounting I.....	3 credits
ACT 1203	Accounting II.....	3 credits
ASI 1011	Introduction to Animal Science.....	1 credit
ASI 1024	Fundamentals of Animal Biology	4 credits
ASI 1213	Livestock & Carcass Evaluation	3 credits
ASI 1253	Nutrition	3 credits
ASI 1303	Animal Management	3 credits
ASI 2203	Feeds and Feeding (P)	3 credits
ASI 2384	Large Animal Diseases & Pharmacology.....	4 credits
ASI 2452	Seedstock Preparation & Marketing.....	2 credits
ASI 2513	Meat Science (P).....	3 credits
ASI 2604	Livestock Anatomy & Physiology.....	4 credits
ASI 2773	Advanced Reproductive Physiology.....	3 credits
ECN 1303	Macroeconomics.....	3 credits
MGT 2103	Management Concepts	3 credits
MGT 2503	Human Resource Management (P)	3 credits

Total 24

Advisor Guided Electives..... **11 credits**

Total Credit Hours for Degree 64

ASSOCIATE OF SCIENCE DEGREE GRAZING LIVESTOCK

Associate Of Science Core 27-29

Grazing Livestock Systems Specialization

Focus (Select 24 hours)

ABM 2003	Critical Thinking	3 credits
ACT 1103	Accounting I	3 credits
AGR 1201	Principles of Soils Lab.....	1 credit
AGR 1203	Principles of Soils	3 credits
ASI 1303	Animal Management	3 credits
ASI 2403	Monitoring Techniques & Data Analysis	3 credits
ASI 2303	Range Management.....	3 credits
ASI 2513	Meat Science (P).....	3 credits
ASI 2604	Anatomy & Physiology	4 credits
ECN 1203	Microeconomics.....	3 credits
MGT 2103	Management Concepts	3 credits

Total 24

Electives 11 credits

Total Credit Hours for Degree 64

CERTIFICATES

BEEF PRODUCTION EMPHASIS

Total Required Core Courses 6

Emphasis Area (Select 12 hours)

ASI 1011	Introduction to Animal Science	1 credit
ASI 1213	Livestock & Carcass Evaluation	3 credits
ASI 1253	Nutrition	3 credits
ASI 1303	Animal Management	3 credits
ASI 2203	Feeds and Feeding	3 credits
ASI 2303	Range Management.....	3 credits
ASI 2353	Livestock Breeding	3 credits
ASI 2384	Livestock Diseases & Pharmacology.....	4 credits

Total 12

Electives 12 credits

Total Credit - Certificate Hours 30

EQUINE TRAINING MANAGEMENT CERTIFICATE

Required Courses

ASI 1263	Basic Equitation (P).....	3 credits
ASI 1432	Equine Care	2 credits
ASI 1501	Equine Safety	1 credit
ASI 1442	Equine Practicum I	2 credits
ASI 2442	Equine Practicum II.....	2 credits
ASI 2462	Colt Starting	2 credits
ASI 2363	Intermediate Training.....	3 credits
ASI 2463	Advanced Performance Training.....	3 credits
ASI 2412	Equine Marketing Techniques .	2 credits

Total Credit - Certificate Hours 20



Discover
Your Way
at NCTA

AGRONOMY AND AGRICULTURAL MECHANICS

DIVISION CHAIR:

Dr. Brad Ramsdale, Associate Professor

FACULTY:

Tee Bush, Associate Professor

Dan Stehlik, Lecturer

MISSION

The Agronomy-Agricultural Mechanics Division is dedicated to the development of innovative individuals in the agronomy, horticulture and agricultural equipment disciplines. These degree programs prepare students for lifelong careers in agronomy, horticulture, and ag equipment industries. Graduates gain technical knowledge necessary for success in their chosen career path and obtain skills for lifelong learning and community leadership.

NCTA's campus includes a farm laboratory with over 500 acres of crop and pasture land combined. The farm has three center-pivots including a state-of-the-art Reinke center-pivot irrigation system. Ag mechanics, welding and irrigation technology laboratories are fully equipped. Additionally, the NCTA greenhouse and high tunnel, Nebraska Statewide Arboretum affiliate site and campus ground, and the surrounding community provide living laboratories for horticulture students.

ASSOCIATE OF APPLIED SCIENCE DEGREE OPTIONS

- + Agronomy Industry Management
- + Agriculture Equipment Management
- + Diversified Agriculture Management

ASSOCIATE OF SCIENCE OPTIONS (TRANSFER)

- + Agronomy
- + Horticulture

CERTIFICATES AND AREAS OF CONCENTRATION

- + Agricultural Chemical Application
- + Crop Production
- + Diversified Agriculture
- + Horticulture
- + Irrigation Technician
- + Agricultural Welding

FARM OWNERSHIP ADVANTAGE PROGRAM

This program is designed to assist students in obtaining their own farm or diversified agriculture operation. The outcome of this program is a beginning farmer loan application.

- + Enroll in Agronomy Industry Management or Diversified Agriculture option.
- + Additional required courses:
 - AGR 1001 Ownership Advantage Seminar I
 - AGR 1501 Ownership Advantage Seminar II
 - AGR 2001 Ownership Advantage Seminar III

PROGRAM OUTCOMES:

1. Students will be able to effectively communicate in oral and written form.
2. Students will be able to gather, assimilate, and process information to reach sound logical conclusions in their chosen career pathway.
3. Students will be able to apply economic principles of accounting, marketing and budgeting to agronomy or agricultural mechanics enterprises.
4. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study. (Technical Competence)

ASSOCIATE OF APPLIED SCIENCE DEGREE OPTIONS

Agronomy-Ag Mechanics Core Courses

The following courses are required for all Associate of Applied Science degree options.

AGR 2903 Internship 3 credits

ECN 1103 Intro to Ag Economics 3 credits

Choose 1 of the following courses:

ABM 2963 Farm Records or

ACT 1103 Accounting I..... 3 credits

Choose 1 of the following courses:

ABM 2854 Farm and Ranch Mgmt or... 4 credits

MGT 2103 Management Concepts 3 credits

Choose 1 of the following courses:

ABM 2903 Entrepreneurship or

AGR 2943 Farm Capstone..... 3 credits

Total 15-16

AGRICULTURAL EQUIPMENT MANAGEMENT OPTION

+ Students will be able to safely operate, troubleshoot and maintain agricultural equipment.

Associate of Applied Science Core.....20-22

Agronomy-Ag Mechanics Core..... 15-16

Equipment Management Courses 20

Choose 20 credits from below

AEQ 1103 Small Engines 3 credits

AEQ 1153 Equipment Principles..... 3 credits

AEQ 1203 Welding 3 credits

AEQ 1313 Intermediate Welding 3 credits

AEQ 1503 DC Circuit Analysis..... 3 credits

AEQ 1513 AC Circuit Analysis 3 credits

AEQ 2211 Hydraulics 1 credit

AEQ 2214 Advanced Welding..... 4 credits

AEQ 2303 Equi. Preventative Main. 3 credits

AEQ 2404 Mechanized Irrigation Sys.... 4 credits

AEQ 2413 Diesel Engines 3 credits

Advisor Guided Electives 12-16

Total Credit Hours for Degree 70

Ag Equipment Suggested Sequence of Study

+ First Semester (Fall)

AEQ 1103 Small Engines 3 credits

AEQ 1153 Equipment Principles..... 3 credits

AEQ 1203 Welding 3 credits

AEQ 2211 Hydraulics 1 credit

AIT 1003 Software Productivity 3 credits

ECN 1103 Intro to Ag Economics..... 3 credits

PSY 1011 Learning Communities..... 1 credit

Total 17

+ Second Semester (Spring)

ABM 2963 Farm Records..... 3 credits

AEQ 1172 Industrial Safety. 2 credits

AEQ 1313 Intermediate Welding 3 credits

AEQ 2303 Equip Prevent Main 3 credits

MTH 1403 Ag Mathematics..... 3 credits

PSY 1103 Human Relations 3 credits

Total 17

+ Summer

AGR 2903 Internship 3 credits

Total 3

+ Third Semester (Fall)

AEQ 1503 DC Circuit Analysis..... 3 credits

AEQ 1513 AC Circuit Analysis 3 credits

BIO 1313 Plant Science..... 3 credits

BIO 1321 Agronomic Plant Sci Lab..... 1 credit

MGT 2103 Management Concepts 3 credits

SPC 1103 Sales Communications..... 3 credits

Total 16

+ Fourth Semester (Spring)

ABM 2903 Entrepreneurship 3 credits

AEQ 1172 Industrial Safety 2 credits

AEQ 2214 Advanced Welding..... 4 credits

AEQ 2323 Precision Farming Tech. 3 credits

AEQ 2413 Diesel Engines 3 credits

ENG 1503 Business & Tech Writing 3 credits

Total 18

AGRONOMY INDUSTRY MANAGEMENT OPTION

+ Students will be able to apply economically sound and environmentally sustainable agricultural crop production practices in the Great Plains.

Associate of Applied Science Core.....20-22
Agronomy-Ag Mechanics Core..... 15-16
Agronomy Option Core 25

See below:

AGR 1091 Crop Practicum I 1 credit
 AGR 1201 Soils Lab 1 credit
 AGR 1203 Principles of Soil 3 credits
 AGR 1591 Crop Practicum II 1 credit
 AGR 2091 Crop Practicum III 1 credit
 AGR 2304 Soil Fertility 4 credits
 AGR 2354 Pest Management 4 credits
 AGR 2383 Irrigation Management 3 credits
 AGR 2404 Crop Management 4 credits

Agronomy Specialization 6

Choose 6 credits from below:

AEQ 1153 Equipment Principles 3 credits
 AEQ 1203 Welding 3 credits
 AEQ 2303 Equip. Prevent. Main. 3 credits
 AEQ 2323 Precision Farming Tech 3 credits
 AEQ 2413 Diesel Engines 3 credits
 AGR 1213 Natural Resource Mgt. 3 credits
 AGR 1891 Crops Judging I 1 credit
 AGR 2892 Crops Judging II 2 credits

Advisor Guided Electives..... 1-4 credits

Total Credit Hours for Degree 70

Agronomy Suggested Sequence of Study

+ First Semester (Fall)

AGR 1091 Crop Practicum I 1 credit
 AGR 1201 Soils Lab 1 credit
 AGR 1203 Principles of Soil 3 credits

AIT 1003 Software Productivity 3 credits
 BIO 1313 Plant Science 3 credits
 BIO 1321 Agronomic Plant Sci. Lab 1 credit
 ECN 1103 Intro to Ag Economics 3 credits
 PSY 1011 Learning Communities 1 credit

Total 16

+ Second Semester (Spring)

ABM 2963 Farm Records 3 credits
 AGR 1591 Crop Practicum II 1 credit
 AGR 2304 Soil Fertility 4 credits
 AEQ 2323 Precision Farming Tech 3 credits
 MTH 1403 Ag Mathematics 3 credits
 PSY 1103 Human Relations 3 credits

Total 17

+ Summer

AGR 2903 Internship 3 credits

Total 3

+ Third Semester (Fall)

ABM 2854 Farm and Ranch Mgmt. 4 credits
 AEQ 1651 Harvest Operations 1 credit
 AGR 2091 Crop Practicum III 1 credit
 AGR 2354 Pest Management 4 credits
 AGR 2383 Irrigation Management 3 credits
 SPC 1103 Sales Communication 3 credits

Total 16

Fourth Semester (Spring)

AEQ 2303 Equip. Prevent. Main. 3 credits
 AGR 2002 Wildlife Habitat Mgmt. 2 credits
 AGR 2404 Crop Management 4 credits
 AGR 2943 Farm Capstone 3 credits
 ENG 1503 Business & Tech Writing 3 credits
 MKT 2203 Ag Marketing 3 credits

Total 18

DIVERSIFIED AGRICULTURE MANAGEMENT OPTION

+ Students will be able to apply economically sound and environmentally sustainable agricultural crop production practices in the Great Plains.

Associate of Applied Science Core.....20-22

Agronomy-Ag Mechanics Core..... 15-16

Diversified Agriculture Core 7

See below:

AGR 1203 Principles of Soils 3 credits

AGR 1201 Soils Lab 1 credit

ASI 1303 Animal Management 3 credits

Diversified Agriculture Specialization .. 12-16

Choose 2 of these Agronomy Courses:

AEQ 2323 Precision Farming Tech 3 credits

AGR 2304 Soil Fertility..... 4 credits

AGR 2354 Pest Management..... 4 credits

AGR 2383 Irrigation Management 3 credits

AGR 2404 Crop Management 4 credits

Choose 2 of these Animal Science Courses:

ASI 1203 Feedlot Operations 3 credits

ASI 1213 Livestock & Carcass Eval 3 credits

ASI 1253 Nutrition 3 credits

ASI 2353 Livestock Breeding 3 credits

ASI 2753 Beef Production 3 credits

Advisor Guided Electives 9-16

Total Credit Hours for Degree 70

Diversified Agriculture Suggested Sequence of Study

+ First Semester (Fall)

AGR 1201 Soils Lab 1 credit

AGR 1203 Principles of Soil 3 credits

AIT 1093 Software Productivity 3 credits

ASI 1303 Animal Management 3 credits

BIO 1313 Plant Science..... 3 credits

BIO 1321 Agronomic Plant Sci. Lab..... 1 credit

ECN 1103 Intro to Ag Economics 3 credits

PSY 1011 Learning Communities..... 1 credit

Total 18

+ Second Semester (Spring)

ABM 2963 Farm Records..... 3 credits

AGR 2304 Soil Fertility..... 4 credits

ASI 1203 Feedlot Operations 3 credits

MTH 1403 Ag Mathematics..... 3 credits

PSY 1103 Human Relations 3 credits

Total 16

+ Summer

AGR 2903 Internship 3 credits

Total 3

+ Third Semester (Fall)

ABM 2854 Farm and Ranch Mgt. 4 credits

AGR 2354 Pest Management..... 4 credits

ASI 1213 Livestock & Carcass Eval 3 credits

ASI 1253 Nutrition 3 credits

SPC 1103 Sales Communications..... 3 credits

Total 17

+ Fourth Semester (Spring)

AGR 2404 Crop Management..... 4 credits

AGR 2943 Farm Capstone..... 3 credits

ASI 2753 Beef Production 3 credits

ENG 1503 Business & Tech Writing 3 credits

MKT 2203 Ag Marketing..... 3 credits

Total 16

ASSOCIATE OF SCIENCE DEGREE OPTION (TRANSFER)

+ Students will demonstrate a basic knowledge in the areas of biology, chemistry, mathematics, and oral/written communication along with a basic understanding of agriculture consistent with standards set for baccalaureate degrees.

Agronomy Option

Associate of Science Core..... 27-29

Agronomy Specialization 24

Choose 24 credits from below

ABM 2854 Farm and Ranch Mgt. 4 credits

ACT 1103 Accounting I..... 3 credits

AGR 1201 Soils Lab 1 credit

AGR 1203 Principles of Soils 3 credits

AGR 2304 Soil Fertility..... 4 credits

AGR 2404 Crop Management..... 4 credits

ASI 2303 Range Management..... 3 credits

ECN 1203 Microeconomics..... 3 credits

ECN 1303 Macroeconomics..... 3 credits

MKT 2203 Ag Marketing..... 3 credits

Advisor Guided Electives 11-13

Total Credit Hours for Degree 64

Agronomy Transfer Suggested Sequence of Study

+ First Semester (Fall)

AGR 1201 Soils Lab 1 credit

AGR 1203 Principles of Soil 3 credits

AIT 1003 Software Productivity 3 credits

BIO 1313 Plant Science..... 3 credits

BIO 1321 Agronomic Plant Sci. Lab..... 1 credit

ECN 1203 Microeconomics 3 credits

PSY 1011 Learning Communities..... 1 credit

Total 15

+ Second Semester (Spring)

ACT 1103 Accounting I..... 3 credits

AGR 2304 Soil Fertility..... 4 credits

ECN 1303 Macroeconomics..... 3 credits

ENG 1903 College Composition 3 credits

MTH 1503 College Algebra 3 credits

Total 16

+ Third Semester (Fall)

ABM 2854 Farm and Ranch Mgt. 4 credits

AGR 2354 Pest Management..... 4 credits

ASI 2303 Range Management..... 3 credits

HSL 1053 Landscape Appreciation..... 3 credits

PSY 1103 Human Relations 3 credits

Total 17

+ Fourth Semester (Spring)

AGR 2404 Crop Management..... 4 credits

CHM 1104 General Chemistry..... 4 credits

ENG 2203 Adv College Composition 3 credits

MKT 2203 Ag Marketing..... 3 credits

SPC 1113 Speech 3 credits

Total 17

HORTICULTURE OPTION

Associate of Science Core.....	26-28
Horticulture Specialization.....	24

Choose 24 credits from below:

ACT 1103	Accounting I.....	3 credits
AGR 1201	Soils Lab	1 credit
AGR 1203	Principles of Soils	3 credits
AGR 2304	Soil Fertility.....	4 credits
ECN 1203	Microeconomics.....	3 credits
HSL 1053	Landscape Appreciation.....	3 credits
HSL 1073	Landscape Plants I.....	3 credits
HSL 1103	Plant Propagation	3 credits
HSL 1173	Landscape Plants II.....	3 credits
HSL 2283	Landscape Management.....	3 credits
HST 1113	Fund. of Turfgrass Mgt.....	3 credits

Advisor Guided Electives 11-13

Total Credit Hours for Degree 64

Horticulture Transfer Suggested Sequence of Study

+ First Semester (Fall)

AIT 1003	Software Productivity	3 credits
BIO 1313	Plant Science.....	3 credits
BIO 1331	Horticultural Science Lab	1 credit
HSL 1053	Landscape Appreciation.....	3 credits
HSL 1073	Landscape Plants I.....	3 credits
PSY 1011	Learning Communities.....	1 credit
SPC 1113	Speech	3 credits

Total 17

+ Second Semester (Spring)

ACT 1103	Accounting I.....	3 credits
ENG 1903	College Composition.....	3 credits
HSL 1173	Landscape Plants II.....	3 credits
HSL 1103	Plant Propagation	3 credits
MTH 1503	College Algebra	3 credits

Total 15

+ Third Semester (Fall)

AGR 1203	Principles of Soils	3 credits
AGR 1201	Soils Lab	1 credit
ECN 1203	Microeconomics.....	3 credits
HSL 2283	Landscape Management.....	3 credits
HTY 1303	Amer History after 1877.....	3 credits
PSY 1103	Human Relations	3 credits

Total 16

+ Fourth Semester (Spring)

AGR 2304	Soil Fertility.....	4 credits
CHM 1104	General Chemistry.....	4 credits
ENG 2203	Adv College Composition.....	3 credits
HST 1113	Fund of Turf Management.....	3 credits
MTH 2203	Elem of Statistics.....	3 credits

Total 17

CERTIFICATES AND AREAS OF CONCENTRATION

AG CHEMICAL APPLICATION

- + Students will be able to mix and apply agricultural chemicals safely and efficiently.
- + Students will be able to interact professionally with colleagues and clients.

Ag Chemical Application Certificate

AEQ 1153	Equipment Principles.....	3 credits
AEQ 2103	Ag Chemical Applicator.....	3 credits
AEQ 2301	Pesticide Certification	1 credit
AEQ 2303	Equip. Preventative Maint. ...	3 credits
AEQ 2323	Precision Farming	3 credits
AGR 2201	Commercial Ag Carrier	1 credit
AGR 2354	Pest Management.....	4 credits

Total Credit Hours for Degree 18

Ag Chemical Application Area of Concentration

AEQ 1153	Equipment Principles	3 credits
AEQ 2103	Ag Chemical Application	3 credits
AEQ 2301	Pesticide Certification	1 credit
AEQ 2303	Equipment Prevent Main	3 credits
AEQ 2323	Precision Farming Tech	3 credits
AGR 2201	Commercial Ag Carrier	1 credit
AGR 2354	Pest Management.....	4 credits
MTH 1403	Ag Mathematics.....	3 credits
PSY 1011	Learning Communities.....	1 credit
PSY 1103	Human Relations	3 credits
SPC 1113	Sales Communication	3 credits
Advisor Guided Electives		6 credits

Total Credit Hours for Degree 34

Irrigation Technician

- + Students will gain a foundational knowledge in electricity and mechanized irrigation systems in order to effectively and safely service, repair, troubleshoot, and install center-pivot systems.
- + Students will be able to interact professionally with colleagues and clients.

Irrigation Technician Area of Concentration

AEQ 1172	Industrial Safety	2 credits
AEQ 1203	Welding	3 credits
AEQ 1501	Intro to Electric Code	1 credit
AEQ 1503	DC Circuit Analysis.....	3 credits
AEQ 1513	AC Circuit Analysis	3 credits
AEQ 2404	Mechanized Irrigation Sys....	4 credits
MTH 1403	Ag Mathematics.....	3 credits
PSY 1011	Learning Communities.....	1 credit
PSY 1103	Human Relations	3 credits
SPC 1113	Sales Communication	3 credits
Advisor Guided Electives		8

Total Credit Hours for Concentration 34

Irrigation Technician Certificate

AEQ 1172	Industrial Safety	2 credits
AEQ 1501	Intro to Electric Code	1 credit
AEQ 1503	DC Circuit Analysis.....	3 credits
AEQ 1513	AC Circuit Analysis	3 credits
AEQ 2404	Mechanized Irrigation Sys....	4 credits
SPC 1113	Sales Communication	3 credits

Total Credit Hours for Certificate 16

Welding

- + Students will be able to perform welding and fabrication technical skills.
- + Students will be able to interact professionally with colleagues and clients.

Agricultural Welding Certificate

AEQ 1172	Industrial Safety	2 credits
AEQ 1203	Welding	3 credits
AEQ 1313	Intermediate Welding	3 credits
AEQ 2214	Advanced Welding.....	4 credits
AEQ 2604	Welding Apprenticeship	4 credits

Total Credit Hours for Certificate 16

Welding Area of Concentration

AEQ 1172	Industrial Safety	2 credits
AEQ 1203	Welding	3 credits
AEQ 1313	Intermediate Welding	3 credits
AEQ 2214	Advanced Welding.....	4 credits
AEQ 2604	Welding Apprenticeship	4 credits
PSY 1011	Learning Communities.....	1 credit

Choose 2 courses from below:

AEQ 1103	Small Engines	3 credits
AEQ 1153	Equipment Principles	3 credits
AEQ 1503	DC Circuit Analysis.....	3 credits
AEQ 2303	Equipment Prevent Main	3 credits
AEQ 2413	Diesel Engines	3 credits

Choose 2 courses from below:

MTH 1403	Ag Mathematics.....	3 credits
PSY 1103	Human Relations	3 credits
SPC 1113	Sales Communication	3 credits

Total Credit Hours for Concentration 29

CROP PRODUCTION CERTIFICATE

+ Students will gain a foundational knowledge in crop production related principles and practices.

Required General Education Credits 6

Crop Production Emphasis 18

Choose 18 credits from below:

AEQ 1153 Equipment Principles 3 credits

AEQ 1203 Welding 3 credits

AEQ 2303 Equipment Prevent Main 3 credits

AEQ 2323 Precision Farming Tech 3 credits

AGR 1201 Soils Lab 1 credit

AGR 1203 Principles of Soils 3 credits

AGR 2304 Soil Fertility 4 credits

AGR 2354 Pest Management 4 credits

AGR 2383 Irrigation Management 3 credits

Advisor Guided Electives 6

Total Credit Hours for Certificate 30

HORTICULTURE CERTIFICATE

+ Students will gain a foundational knowledge in horticultural principles and practices.

Required General Education Credits 6

Horticulture Emphasis 12

Choose 12 credits from below:

AEQ 1103 Small Engines 3 credits

AGR 1201 Soils Lab 1 credit

AGR 1203 Principles of Soils 3 credits

HSL 1053 Landscape Appreciation 3 credits

HSL 1073 Landscape Plants I 3 credits

HSL 1103 Plant Propagation 3 credits

HSL 1173 Landscape Plants II 3 credits

HSL 2283 Landscape Management 3 credits

HST 1113 Fund of Turfgrass Mgmt 3 credits

Advisor Guided Electives 12

Total Credit Hours for Certificate 30

DIVERSIFIED AGRICULTURE CERTIFICATE

+ Students will gain a foundational knowledge in crop and livestock production principles and practices.

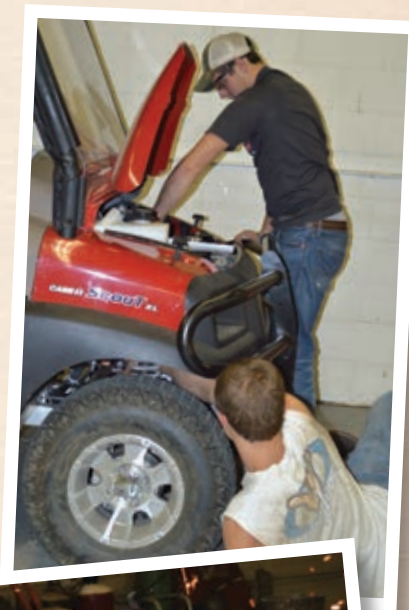
Required General Education Credits 6

Diversified Agriculture Emphasis 12

*Choose 12 credits from AGR, AEQ, ASI,
or HSL courses*

Advisor Guided Electives 12

Total Credit Hours for Certificate 30



VETERINARY TECHNOLOGY SYSTEMS

DIVISION CHAIR:

Barbara Berg, LVT, Assistant Professor

FACULTY:

Ricky Sue Barnes Wach, D.V.M., Professor

Judy Bowmaster Cole, LVT, Assistant Professor

Glenn Jackson, D.V.M., Assistant Professor

VETERINARY TECHNOLOGY MISSION

The Veterinary Technology Systems division is dedicated to the development of innovative individuals for careers in the animal health industry. The focus of the Veterinary Technology Associate of Applied Science degree is to provide the hands-on skills and academic background needed for graduates to accept and be successful in career opportunities within the animal health industry, be lifelong learners and involved community members. NCTA maintains a wide variety of animals to provide the students with a consistent and broad background of experience.

ASSOCIATE OF APPLIED SCIENCE DEGREE OPTIONS

Veterinary Technician Option

- ✦ Eligible to sit for the Veterinary Technician National Exam (VTNE) and become a licensed Veterinary Technician.

Veterinary Assistant Option

Animal Husbandry Option

Animal Health Management Option

Equine Health Care Option

CERTIFICATES

Animal Health Care Certificate

Laboratory Animal Care Certificate

- ✦ This curriculum helps prepare you to become a certified laboratory animal technician, caring for animals and supporting professionals at institutions looking to solve a multitude of medical problems, like cancer and diabetes, that affect millions of people and animals all over the world.

BACCALAUREATE TRANSFER OPTIONS

Veterinary Technologist Transfer Option

- ✦ Capstone with UNL Veterinary Science

Associate of Applied Science-Veterinary Technician Option:

The focus of NCTA's Associate of Applied Science, Veterinary Technician Option is to provide the hands-on skills and academic background needed to accept career opportunities as an entry level veterinary technician. The program is American Veterinary Medical Association (AVMA) accredited with the curriculum based around the AVMA essential tasks and skill list. Veterinary Technology - Technician Option graduates are qualified to sit for the VTNE and become a licensed Veterinary Technician. NCTA maintains a wide variety of animals to provide the



students with a consistent and broad background of experience. This option recommends 80 hours of observation in a veterinary clinic. The program requirements include 76 credit hours of structured classes covering AVMA essential skills, an 8 week internship, passing the exit exam and a CGPA of 80%.

Veterinary Technician Option Entrance Requirements:

An ACT Score (the Veterinary Technician or equivalent) of 18 or higher is recommended to enroll in and complete the Veterinary Technician Option Honors Program in two years. With an ACT score of less than 18, it is recommended that students plan to complete the program in 3 years.

The Animal Husbandry, Equine Health Care, Veterinary Assistant and Animal Health Management Option are open to all students and can be completed in 2 years.

Veterinary Technologist:

A baccalaureate degree as a Veterinary Technologist can be pursued through a collaborative effort with NCTA's Veterinary Technician Option Degree and the University of Nebraska-Lincoln. Students interested should inform their advisor of their intent upon initial registration.

Final Assessment – Veterinary Technician Option - Exit Exam:

The Exit Exam is one required criteria for the Veterinary Technician Option. At the end of the student's last spring semester, the Veterinary Technician Exit Exam is offered. To be eligible to take this exam the Vet Tech student must be able to have successfully completed (with the exception of internship) the 76 required credit hours by the end of the semester. The exit exam is administered the last week in April each year.

The entire comprehensive examination must be passed with an average grade of 70% or better and each section must be passed with a minimum grade of 60% or better. A maximum of two sections may be repeated during the provided repeat time. Each student must complete the required 76 credit hours of classes, have a CGPA of 80% and pass the Exit Exam to graduate with the Veterinary Technician Option.

Final Assessment - Veterinary Technology

Animal Husbandry, Veterinary Assistant, Animal Health Care Mgt, Equine Health Care

The Final Assessment Exam is one required criteria for the Veterinary Technology Options. At the end of the student's last spring semester, the Veterinary Technology Final Assessment Exam is offered. To be eligible to take this exam the Vet Tech student must be able to have successfully completed (with the exception of internship) the required credit hours by the end of the semester. The 200 question written comprehensive final assessment is administered the last week in April each year.

Each student must complete the required credit hours of classes, have a CGPA of 70% and take the final assessment exam to graduate from the Animal Husbandry, Veterinary Assistant, Animal Health Mgt or Equine Health Care Option.

Veterinary Technology Handbook:

All Veterinary Technology students should read the Veterinary Technology Student Handbook that can be found on the NCTA web page.

Veterinary Technician Option and Licensing:

Graduation with the Veterinary Technician Option requires 76 credit hours, an exit exam, and a CGPA of 3.0. To be eligible to work as or to refer to yourself as a veterinary technician in Nebraska, one must graduate from an AVMA accredited Veterinary Technology Program (Technician Option), pass the VTNE, and become licensed with the state.

Each student must complete the required 76 credit hours of classes, have a CGPA of 80% and pass the exit exam to graduate with the Veterinary Technician Option.

PROGRAM OUTCOMES FOR VETERINARY TECHNICIAN OPTION:

1. Upon successful completion of the Veterinary Technician Option, students will be able to demonstrate proficiency in the essential skill tasks outlined by the American Veterinary Medical Association. The Skills List represents the complex role of the veterinary technician and encourages instruction in motor skills, critical thinking,

entrepreneurship, and clinical application at the entry veterinary technician level in the following areas.

- + Office and Hospital Procedures
- + Pharmacy and Pharmacology
- + Nursing Skills
- + Anesthesia
- + Radiology
- + Surgical Prep & Nursing
- + Parasitology, Hematology, and Clinical Pathology
- + Animal Husbandry, Handling, Behavior, and Restraint
- + Anatomy

2. Upon successful completion of the Veterinary Technician Option, students will be able to demonstrate the academic background needed to pass a national Veterinary Technician National Exam (licensing). This is assessed through the VT Exit Exam and obtaining a 3.0 CGPA.

Exit Exam - Veterinary Technician Option Assessment

The Exit Exam is one required criteria for the Veterinary Technician Option. To be eligible to take this exam the Vet Tech student must be able to have successfully completed (with the exception of internship) all required credit hours by the end of the spring session. The exit exam is administered once a year at the end of spring semester/session. The entire comprehensive examination must be passed with an average grade of 70% or better and each section must be passed with a minimum grade of 60% or better. A maximum of two sections may be repeated during the provided repeat time. Each student must complete all required classes, have a CGPA of 80% and pass the exit exam to graduate with the Veterinary Technician Option. Each written section is 50 questions in length. Tests are taken during designated times.

PROGRAM OUTCOMES FOR VETERINARY ASSISTANT OPTION:

1. Students will be able to effectively communicate in oral and written formats.
2. Upon successful completion of the Veterinary Assistant Option, students will be able to demonstrate proficiency in the essential skills and tasks

outlined by the American Veterinary Medical Association. The skills list represents the complex role of the veterinary assistant and encourages instruction in motor skills, critical thinking, entrepreneurship and clinical application at the entry veterinary technician level in the following areas:

- + Office and Hospital Procedures
- + Pharmacy and Pharmacology
- + Nursing Skills
- + Anesthesia
- + Radiology
- + Surgical Prep and Nursing
- + Parasitology, Hematology, and Clinical Pathology
- + Animal Husbandry, Handling, Behavior, and Restraint
- + Anatomy

PROGRAM OUTCOMES FOR ANIMAL HUSBANDRY, ANIMAL HEALTH MANAGEMENT, EQUINE HEALTH CARE:

1. Students will be able to effectively communicate in oral and written formats.
2. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study. (Technical Competence)

- + Office and Hospital Procedures
- + Pharmacy and Pharmacology
- + Nursing Skills
- + Nursing
- + Animal Husbandry, Handling, Behavior, and Restraint
- + Anatomy

VETERINARY TECHNICIAN OPTION

Associate of Applied Science Core	20 credits
VTS & VTE Courses	55 credits
Internship	3 credits

Total Credit Hours for Degree 78

ACT less than 18 take:

ENG 80	Reading Strategies.....	2 credits
ENG 90	Elements of Writing	2 credits

and complete the program over 3 years instead of 2 years, taking 12 to 15 hours each semester

Sequence of Study

+ First Semester (1st Fall)

PSY 1011	Learning Communities.....	1 credit
VTS 1301	Medical Terminology	1 credit
VTS 1313	Math for Vet Techs <u>or</u>	
MTH 1503	College Algebra	3 credits
VTS 1404	Anatomy & Physiology.....	4 credits
VTS 1511	Intro to Animal Science.....	1 credit
VTS 1513	Animal Care	3 credits
VTS 2563	Fur and Feather.....	3 credits
VTS 1542	Facility Management <u>or</u>	2 credits
	4 science credits from below:	
BIO 1104	General Biology <u>or</u>	
CHM 1104	General Chemistry <u>or</u>	
CHM 1014	Intro to Chemistry.....	4 credits

Total 18-20

+ Second Semester (1st Spring)

AIT 1003	Software Productivity	3 credits
VTS 1521	Production Animals (P).....	1 credit
VTS 1603	Intro to Lab Science	3 credits
VTS 1713	Pharmacology & Anesthesia.....	3 credits
VTS 1822	Radiology I (P).....	2 credits
VTS 2583	Nursing I (P).....	3 credits

VTS 1542	Facility Mgt <u>or</u>	2 credits
	4 science credits from below:	

BIO 1104	General Biology <u>or</u>	
CHM 1104	General Chemistry <u>or</u>	
CHM 1014	Intro to Chemistry.....	4 credits

Total 17-19

+ 1st Summer Session (8 weeks)

ASI 1253	Nutrition	3 credits
	(Equine, Canine, Livestock)	
SPC 1103	Sales <u>or</u>	
SPC 1113	Speech.....	3 credits
VTS 2652	Parasitology (P).....	2 credits
VTS 2823	Radiology II (P).....	3 credits

Total 11

+ Third Semester (2nd Fall)

ENG 1503	Business & Technical Writing <u>or</u>	
ENG 1903	College Composition	3 credits
VTS 2331	Clinical Practices (P)	1 credit
VTS 2532	Large Animal Techniques (P)	2 credits
VTS 2593	Nursing II (P).....	3 credits
VTS 2672	Hematology (P).....	2 credits
VTS 2733	Diseases of Veterinary Medicine (P)	3 credits
VTS 2933	Anesthesiology (P).....	3 credits

Total 17

+ Fourth Semester (2nd Spring) – 1st 8 weeks

AED 1023	Interpersonal Skills of Leadership.....	3 credits
VTS 2241	Career Strategies (P)	1 credit
VTS 2551	Large Animal Clinical Rotation <u>or</u>	
VTE 1621	Calving Rotation	1 credit
VTS 2682	Clinical Pathology (P).....	2 credits
VTS 2953	Surgery Prep (P).....	3 credits
Exit Exam (P) (VT only)	0 credits

2nd 8 weeks

VTS 2243	Internship	3 credits
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Total 13

VETERINARY ASSISTANT OPTION

Students follow the same course flow as the Veterinary Technician Option.

ANIMAL HUSBANDRY OPTION

Associate of Applied Science

Associate of Applied Science Core ..	20 credits
VTS & VTE Courses	32 credits
Internship	3 credits
VTS, VTE or APS Courses	15 credits
Electives	6 credits

Total Credit Hours for Degree 76

ACT less than 18 take:

ENG 80	Reading Strategies.....	2 credits
ENG 90	Elements of Writing	2 credits

and complete the program over 3 years instead of 2 years, taking 12 to 15 hours each semester

Suggested Sequence of Study

+ First Semester (1st Fall)

AIT 1003	Software Productivity	3 credits
ASI 1432	Equine Care <u>or</u>	
VTS 1542	Facility Management I	2 credits
VTS 1313	Math for Vet Techs <u>or</u>	
MTH 1503	College Algebra	3 credits
PSY 1011	Learning Communities.....	1 credit
VTS or VTE Courses		4 credits
APS or VTS or VTE Courses		3 credits
Electives		1-2 credits

Total 18

+ Second Semester (1st Spring)

SPC 1103	Sales <u>or</u>	
SPC 1113	Speech.....	3 credits
VTS 1822	Radiology I (P) <u>or</u>	2 credits
VTE 2821	Radiation Safety.....	1 credit
VTS 2241	Career Strategies (P)	1 credit

Science (4 credit hours from the following):

ASI 1024	Fundamentals of Animal Biology <u>or</u>	
BIO 1104	General Biology <u>or</u>	4 credits
BIO 1313	Plant Science <u>plus</u>	3 credits
BIO 1321	Plant Science Lab <u>or</u>	
BIO 1331	Horticulture Science Lab	1 credit
CHM 1104	General Chemistry <u>or</u>	
CHM 1014	Intro to Chemistry.....	4 credits
VTS or VTE Courses		4 credits
APS or VTS or VTE Courses		3 credits
Electives		0-1 credits

Total 18

+ 1st Summer Session (8 weeks)

VTS 2243	Internship	3 credits
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+ Third Semester (2nd Fall)

ENG 1503	Business & Technical Writing <u>or</u>	
ENG 1903	College Composition	3 credits
VTS or VTE Courses		9 credits
APS or VTS or VTE Courses		4 credits
Electives		2 credits

Total 18

+ Fourth Semester (2nd Spring) – 1st 8 weeks

AED 1023	Interpersonal Skills of Leadership.....	3 credits
VTS or VTE Courses		10 credits
APS or VTS or VTE Courses		4 credits
Electives		2 credits

Total 19

EQUINE HEALTH CARE OPTION

Associate of Applied Science Core ..	20 credits
VTS & VTE Courses	39 credits
Internship	3 credits
ASI Courses	8 credits
Electives.....	6 credits

Total Credit Hours for Degree 76

ACT less than 18 take:

ENG 80	Reading Strategies.....	2 credits
ENG 90	Elements of Writing	2 credits

and complete the program over 3 years instead of 2 years, taking 12 to 15 hours each semester

Suggested Sequence of Study**+ First Semester (1st Fall)**

ASI 1442	Equine Practicum I.....	2 credits
ASI 1501	Equine Safety	1 credit
PSY 1011	Learning Communities.....	1 credit
VTE 1643	Equine Health Records.....	3 credits
VTS 1301	Medical Terminology.....	1 credit
VTS 1313	Math for Vet Techs.....	3 credits
VTS 1404	Anatomy & Physiology.....	4 credits
VTS 1511	Intro to Animal Science.....	1 credit

Total 16

+ Second Semester (1st Spring)

AED 1023	Interpersonal Skills of Leadership.....	3 credits
ASI 1432	Equine Care	2 credits
VTE 2611	Equine Reproduction	1 credit
VTS 1521	Production Animals (P).....	1 credit
VTS 1603	Intro to Lab Science.....	3 credits
VTS 1713	Pharmacology & Anesthesia.....	3 credits
VTS 1822	Radiology I (P).....	2 credits

Total 15

+ First Summer

SPC 1103	Sales or	
SPC 1113	Speech.....	3 credits
VTE 2623	Feeding Equine Patient.....	3 credits

Total 6

+ Third Semester (2nd Fall)

ACT 1103	Accounting I.....	3 credits
ASI 2433	Equine Industry Management I.....	3 credits

ENG 1503	Business & Technical Writing or	
ENG 1903	College Composition	3 credits
VTE 1623	Equine Lab Diagnostics (P).....	3 credits
VTE 1633	Equine Diseases	3 credits
VTS 2532	Large Animal Techniques (P).....	2 credits

Total 17

+ Fourth Semester (2nd Spring)

AIT 1003	Software Productivity	3 credits
VTE 2613	Equine Anesthesia & Surgery (P).....	3 credits
VTE 2643	Equine Nursing (P)	3 credits
VTS 2241	Career Strategies (P)	1 credit

Science (4 credit hours from the following):

ASI 1024	Fundamentals of Animal Biology or	
BIO 1104	General Biology or	4 credits
BIO 1313	Plant Science plus	3 credits
BIO 1321	Plant Science Lab or	
BIO 1331	Horticulture Science Lab	1 credit

CHM 1104	General Chemistry or	
CHM 1014	Intro to Chemistry.....	4 credits
Electives	4 credits

Total 18

+ 2nd Summer Session (8 weeks)

VTS 2243	Vet Tech Internship	3 credits
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Choose 6 elective credit hours from the below classes:

ASI 1241	Ranch Horse I
ASI 1253	Nutrition
ASI 1263	Basic Equitation
ASI 2412	Equine Marketing Techniques
ASI 2433	Equine Industry Management II
VTE 1611	Concepts in Biting
VTE 1631	Practical Skills
VTE 2342	Spanish for Animal Health
VTE 2811	Ultra Sound
VTS 2511	Large Animal Clinical Rotation
VTS 2652	Parasitology (P)
VTS 2823	Radiology II (P)

ANIMAL HEALTH MANAGEMENT

Associate of Applied Science Core ..	20 credits
Business & VT Courses.....	47 credits
Internship	3 credits
Electives.....	6 credits

Total Credit Hours for Degree 76

ACT less than 18 take:

ENG 80	Reading Strategies.....	2 credits
ENG 90	Elements of Writing	2 credits

and complete the program over 3 years instead of 2 years, taking 12 to 15 hours each semester

Suggested Sequence of Study

+ First Semester (1st Fall)

ACT 1103	Accounting I.....	3 credits
ASI 1501	Equine Safety	1 credit
PSY 1011	Learning Communities.....	1 credit
VTS 1301	Medical Terminology	1 credit
VTS 1511	Intro to Animal Science.....	1 credit

Choose one of the following:

MTH 1503	College Algebra or	
VTS 1313	Math for Vet Techs.....	3 credits
	Veterinary Technology Courses	4-5 credits
	Business Courses.....	2-3 credits
	Electives	0-3 credits

Total 18

+ Second Semester (1st Spring)

ACT 1203	Accounting II (P).....	3 credits
AIT 1003	Software Productivity	3 credits
ENG 1903	College Composition	3 credits
VTE 2821	Radiation Safety or	1 credit
VTS 1822	Radiology I (P).....	2 credits
	Veterinary Technology Courses	3-5 credits
	Electives	3 credits

Total 18

+ Third Semester (2nd Fall)

AED 1023	Interpersonal Skills of Leadership	3 credits
MGT 2103	Management Concepts	3 credits
VTE 2322	Intro to the Vet Office.....	2 credits
	Veterinary Technology Courses	2-4 credits
	Business Courses.....	2-4 credits
	Electives	0-3 credits

Total 18

+ Fourth Semester (2nd Spring)

	Nutrition (Equine, Canine, Livestock).....	3 credits
VTS 2241	Career Strategies	1 credit

Science (4 credit hours from the following):

ASI 1024	Fundamentals of Animal Biology or	
BIO 1104	General Biology or	4 credits
BIO 1313	Plant Science plus	3 credits
BIO 1321	Plant Science Lab or	
BIO 1331	Horticulture Science Lab	1 credit
CHM 1104	General Chemistry or	
CHM 1014	Intro to Chemistry.....	4 credits

Choose one of the following:

SPC 1103	Sales Communication	3 credits
SPC 1113	Speech.....	3 credits
	Veterinary Technology Courses	2-4 credits
	Business Courses.....	2-4 credits
	Electives	0-3 credits

Total 19

+ Summer - 1st or 2nd

VTS 2243	Internship.....	3 credits
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Veterinary Technology Course List

VTE 2041	Making a Difference
VTE 2342	Spanish for the Vet Clinic
VTE 2423	Canine & Feline Nutrition
VTE 2522	Exotic Pet Selection and Care
VTE 2532	Bird Behavior and Training Methods
VTE 2743	Vet Tech Overview
VTE 2811	Ultrasound

VTL 1113	Laboratory Animal Medicine I
VTS 1122	Laboratory Animal Medicine II (P)
VTS 1133	Laboratory Animal Management (P)
VTS 1404	Anatomy & Physiology
VTS 1513	Animal Care
VTS 1521	Production Animals (P)
VTS 1542	Facility Management I
VTS 1603	Intro to Laboratory Science
VTS 1713	Pharmacology & Anesthesiology
VTS 2551	Large Animal Clinical Rotations
VTS 2563	Fur & Feather
VTS 2583	Nursing I
VTS 2652	Parasitology (P)
VTS 2672	Hematology (P)
VTS 2682	Clinical Pathology
VTS 2823	Diseases of Veterinary Medicine

Business Courses

See Business Section of College Catalog

BACCALAUREATE TRANSFER PROGRAM (CAPSTONE)

NCTA/UNL TRANSFER PROGRAM (CAPSTONE)

VETERINARY TECHNOLOGIST B.S. DEGREE

Students may elect to pursue a baccalaureate degree program as a Veterinary Technologist via an integrated capstone program through NCTA and UNL. This major requires the completion of the Associate of Applied Science with the Veterinary Technician Option at NCTA and completion of the required UNL classes on the Lincoln campus. Students selecting this major requires the completion of an Associate of Applied Science Degree in Veterinary Technology – Technician Option at Curtis, pass the Veterinary Technician National Exam and complete the required classes and Capstone Program at the University of Nebraska-Lincoln. Students may begin their course of study on either the Lincoln or Curtis campus. Veterinary Technologist options available are Business, Science and Veterinary Science.

Agribusiness Management Minor

See Business section of College Catalog.

Agriculture Productions Systems Minor

See Agriculture Production section of College

CERTIFICATE

Animal Care

12 hours Required

Select 12 hours from the following

ASI 1011	Intro to Animal Science.....	1 credit
ASI 1501	Equine Safety	1 credit
VTE 1021	Canine Grooming	1 credit
VTE 1403	Anatomy and Physiology	3 credits
VTE 1512	Animal Care <u>or</u>	2 credits
VTS 1513	Animal Care.....	3 credits

VTE 2101	Dog Training	1 credit
VTE 2322	Intro to the Vet Office.....	2 credits
VTS 1301	Medical Terminology	1 credit
VTS 1313	Math for Vet Techs.....	3 credits
VTS 1404	Anatomy and Physiology	4 credits
VTS 1542	Facility Management I	2 credits
VTS 1603	Intro to Laboratory Science.....	3 credits

TOTAL 12

CERTIFICATE

Laboratory Animal Care

VTL 1113	Lab Animal Medicine I	3 credits
VTL 1122	Lab Animal Medicine II.....	2 credits
VTL 1133	Lab Animal Management.....	3 credits
VTS 1262	Lab Animal Internship.....	2 credits
VTS 1301	Medical Terminology	1 credit
VTS 1313	Math for Vet Techs.....	3 credits
VTS 1603	Intro to Laboratory Science.....	3 credits
VTS 2563	Fur and Feather	3 credits

TOTAL 20

COURSE DESCRIPTIONS

GENERAL EDUCATION

BIO 1104 General Biology 4 Hrs

Examination of fundamental principles of plant and animal biology including cell biology, genetics, development, diversity, and ecology.

BIO 1313 Plant Science 3 Hrs

Biology of plants grown for food, fiber, fun, or fuel. Plant life cycles in managed ecosystems and their role in global carbon and water cycles. Mechanisms plants use to drive and control their growth, propagate, and change to compete with other organisms in their environment.

BIO 1321 Plant Science Laboratory 1 Hr

Growth, development, morphology and staging of annual and perennial monocot and dicot plants produced for grain, forage and grazing. Evaluation of seed, grain and forage quality for plants of agricultural importance.

BIO 1331 Introduction to Horticulture Science Laboratory 1 Hr

Introduction to and practical experience in the production and usage of horticultural plants.

CHM 1014 Introduction to Chemistry I 4 Hrs

(Pre Req: One year of high school algebra or one semester of college algebra) A basic course for students with limited background in chemistry; includes 3 credits of lecture hours and 1 credit of laboratory hours.

CHM 1024 Introduction to Chemistry II 4 Hrs

(Pre Req: CHM 1014 or permission of instructor) CHM 1024 is a continuation of CHM 1014 as a basic course for students with limited background in chemistry; includes 3 credits of lecture hours and 1 credit of laboratory hours.

CHM 1104 General Chemistry I 4 Hrs

(Pre Req: Two years of high school algebra and one year of high school chemistry or two years of high school algebra and CHM 1014 or permission of

instructor) The first semester of a comprehensive year course in chemistry that includes the principles and theories of modern chemistry. This course is designed for students who need a good theoretical background in chemistry, and it is the prerequisite for advanced chemistry courses.

CHM 2104 General Chemistry II 4 Hrs

(Pre Req: CHM 1104 or permission of instructor) The second semester of the comprehensive year course in chemistry.

ENG 0080 Reading Strategies 2 Hrs

This course allows students who have not achieved minimum placement scores in reading (18 ACT in Reading) an opportunity to develop skills in reading before attempting the required English courses. This course does not satisfy degree requirements, it is not an elective, and it does not transfer.

ENG 0090 Elements of Writing 2 Hrs

This course allows students who have not achieved minimum placement scores in writing (18 ACT in English) an opportunity to develop skills in writing before attempting the required English courses. This course does not satisfy degree requirements, it is not an elective, and it does not transfer.

ENG 1503 Business & Technical Writing 3 Hrs

(Pre Req: 18 ACT Reading & 18 ACT English or ENG 0080/0090 equivalent or permission through English placement process) This course emphasizes the principles and strategies of written communication about technical subject matter using various media. It is designed to prepare the student to present technical and scientific documents in a clear and informative manner.

ENG 1903 College Composition 3 Hrs

(Pre Req: 18 ACT Reading & 18 ACT English or ENG 0080/0090 equivalent or permission through English placement process) A refinement of writing skills and critical reading, emphasizing the relationship between purpose and form, clarity, accuracy of expression, the development of the writer's voice and style, the

elements of critical thinking, and the development of the research paper to prepare for university studies.

ENG 2203 Advanced College Composition 3 Hrs

(Pre req: English 1503 or 1903) A course for students seeking advanced work in reading and writing expository prose and in methods of research.

ENG 2223 Intro to Creative Writing 3 Hrs

Introduction to the writing of poetry, fiction, and screenplays. Lectures and discussions emphasize the principles, processes, and techniques of creative writing. Students develop their ability to respond to literature and scripts through workshops, discussions, and written assignments requiring them to analyze professional and peer works. Emphasis on literary (as opposed to "slick") writing.

HON 1001 – Honors Seminar I 1 Hr

The first of 2 courses for students accepted into NCTA's Honor's Program. Various learning activities will be provided to enhance the student's leadership and critical thinking skills. Students will develop an Honor's Project that is either a research project or creative activity in the student's area of interest. A faculty member at NCTA and perhaps WCREC will be selected to advise the Honor's Project.

HON 2001 – Honors Seminar II 1 Hr

The second of 2 courses for students accepted into NCTA's Honor's Program. Various learning activities will be provided to enhance the student's leadership and critical thinking skills. Students will complete the Honor's Project developed during Honors Seminar I. A written report and oral presentation of the project will be given to NCTA faculty. Presentation or written report of the project to relevant professional societies is encouraged.

HTY 1303 American History After 1877 3 Hrs

Examines the economic, political, social, and cultural development of the United States from the end of the Reconstruction era through the modern era. Through lectures, readings, assignments, and discussion, students will be asked to interpret and critically evaluate historical documents, perspectives, concepts, and events.

MTH 1103 Basic Math 3 Hrs

A study of the fundamentals of math with a review of fractions, decimals, ratio proportions, and percentages. Basic algebra, geometry, and statistics will be covered as they apply to the agriculture industry.

MTH 1203 Intermediate Algebra 3 Hrs

Properties of real numbers, factoring, exponents and radicals, linear and fractional equations, linear and nonlinear inequalities, quadratic equations, and functions and graphs. This course may not be accepted in transfer toward the general education requirement for a baccalaureate degree.

MTH 1403 Agricultural Mathematics 3 Hrs

A study of mathematics, geometry and algebra that are utilized in the agricultural industry. Problems will include examples from crop production, horticulture, livestock management and agricultural business.

MTH 1503 College Algebra 3 Hrs

Functions, inverse functions, graphing of linear and quadratic functions, the conic sections, polynomial functions, rational functions, exponential and logarithmic functions, systems of equations, determinants and matrices, and higher degree equations.

MTH 2203 Elements of Statistics 3 Hrs

Frequency distributions, elementary probability theory, measures of dispersion and central tendency, normal distributions, confidence intervals, hypotheses testing, regression, and correlation.

MTH 2253 Trigonometry 3 Hrs

Designed for students who plan further study at the calculus level. Numerical trigonometry. trigonometric analysis, inverse trigonometric functions, and complex numbers.

PAE 1011 Fitness Center 1 Hr

This course provides students the opportunity to pursue individual fitness goals. Emphasis is placed on fitness as a lifelong pursuit of wellness. Minimum of 1 hour per week is required.

PSY 1011 Learning Communities 1 Hr

The Learning Community is designed to increase a student's success in college by fostering relationships between peers, faculty and the extended community in which they live. In addition, skills are taught that will be necessary for students to reach educational objectives.

PSY 1103 Human Relations 3 Hrs

This course studies the psychology of humans and their relationships with others. Emphasis is placed on one's ability to get along with others in a working relationship.

SPA 1115 Beginning Spanish I 5 Hrs

Emphasis on development of comprehension of written and spoken Spanish; reading of simple texts dealing primarily with the Spanish-speaking world and with cultural and historical background of Spanish civilization; oral and aural drill supplemented by practice in pronunciation laboratory.

SPC 1113 Speech 3 Hrs

This course contains a study of the methods of developing and presenting oral communications. It includes techniques in speech making and other methods of communicating orally in the business world.

AGRIBUSINESS MANAGEMENT SYSTEMS**ABM 1803 Business Statistics 3 Hrs**

Basic statistical analysis of business and economic data used in the decision making process. Topics include collection and presentation of data, discrete and continuous distributions, probability and sampling theory, statistical inference and hypothesis testing.

ABM 2003 Critical Thinking 3 Hrs

Living in the information age, it is imperative to be able to process, sort and analyze information, not just for usefulness but also for accuracy. This course is designed to equip students with the tools necessary to work with the amount of information available today and to make good decisions based on sound solutions in an ever-changing workplace.

ABM 2004 Internship 4 Hrs

(Pre req: Approval by Division Chair, students are required to have a minimum CGPA of 2.0 before being allowed to go out on internship and must have completed two semesters) Internship includes a mandatory 8-week job placement experience at an approved work location. Agreements are entered into between the student, the employer and the college.

ABM 2103 Personal Finance 3 Hrs

(Pre req: ACT 1103, MTH 1203, MTH 1503) This course is to develop understanding of personal finance. Topics include basic financial planning, money management, insurance, investments and current events related to personal finance.

ABM 2403 Ag Finance 3 Hrs

(Pre req: ACT 1103, MTH 1203, MTH 1503) An in-depth study of financial analysis and the financial institutions which serve agricultural businesses. For each particular type of financial institution, this course will study its sources of capital, its general loan criteria used to evaluate loan requests, and its financial performance. For ag borrowers, this course will also examine their financial condition, their projected cash flow and the importance of risk management.

ABM 2503 Ag Decision Analysis 3 Hrs

(Pre req: AIT 1003) Introduction to quantitative decision-making methods for effective agribusiness management, emphasis on problem identification, model formulation and solution, interpretation and presentation of results.

ABM 2854 Farm and Ranch Management 4 Hrs

(Pre req: ACT 1103 or ABM 2963, ECN 1203) Business management concepts which are involved in the decision-making process when organizing and operating a farming/ranching operation. Includes production economics, record keeping systems, financial budgets and analysis, crop and livestock enterprise analysis, depreciation, cash flow planning equity, and production efficiency indicators.

ABM 2903 Entrepreneurship 3 Hrs

(Pre req: ACT 1103, MGT 2103, ACT 1203 or enrolled in ACT 1203) This course includes the skills and attitudes necessary for starting and maintaining a successful business: personal (self) assessment, government regulations, financing and marketing options, and writing a business plan.

ABM 2911 Seminar 1 Hr

(Pre req: Fall before graduation) In their last semester before graduation, majors will be required to research, write and report on an agribusiness issue that pertains to their Option, and complete a presentation on their internship.

ABM 2963 Farm, Ranch, and Small Business Recordkeeping 3 Hrs

Business record systems for farming and ranching. Manual and computerized record keeping techniques to aid farm and ranch managers and small business owners in making management and production decisions and preparing tax returns.

ABM 2991 Independent Study 1-3 Hrs

(Pre req: Approval of project by Instructor, Advisor, and Division Chair) This course consists of elective individual or group projects. Projects may include research, continuing education programs, and group tours. The project is developed under the supervision and evaluation of a department faculty member who is willing and available to contract with the student. This class requires a written paper, and may require a presentation (up to the discretion of the supervising faculty member). Students may enroll in this course a maximum of 3 times, for a total of 3 credit hours.

ACT 1103 Accounting I 3 Hrs

(Pre req: Enrolled in MTH 1103, MTH 1203, or MTH 1503) This course is a study in the fundamentals of accounting concepts and procedures. Concepts include financial reporting and analysis.

ACT 1203 Accounting II 3 Hrs

(Pre req: ACT 1103) Continuation of Accounting I with emphasis given to financial statement analysis, costing systems, and the budgeting process. The managerial uses of accounting information for decision making are introduced.

AIT 1003 Software Productivity 3 Hrs

Introduction to the spreadsheet application, Microsoft Excel. Students will be learning to apply formatting, work with formulas and functions, and create graphs and charts, in addition to creating, saving, revising, and printing documents.

AIT 1073 Introduction to Databases 3 Hrs

(Pre req: AIT 1092) This course will introduce the student to the basics of relational databases using Microsoft Access. Students will learn the basics of database creation and management. Creating and manipulating databases adds an additional information management tool to the business manager's tool kit.

AIT 1083 Introduction to Desktop Publishing and Web Design 3 Hrs

This course will introduce the student to the basics of desktop publishing and web design.

ECN 1103 Intro to Ag Economics 3 Hrs

This course will include an overview of food and agricultural issues. Goals of this course will be to introduce students to the agribusiness sector of the U.S., survey of economic concepts that affect food and agricultural issues and develop an understanding of the interconnectedness of agricultural supply businesses, farm and ranch production, food markets, distribution and consumption.

ECN 1203 Microeconomics 3 Hrs

This course is designed to introduce the student to basic economic concepts and to the role of agriculture in today's business environment. Emphasis is placed on supply, demand, production costs, consumption, utility, various types of competition, and consumer/producer behavior in various markets.

ECN 1303 Macroeconomics 3 Hrs

(Pre req: ECN 1203) A study of how economic variables interact in the U.S. and the world. Course materials will include analysis of aggregate economic variables, such as national income, consumption, saving, inflation, employment, investment, international variables, price indices, money, and interest.

ECN 1403 Economics of World Food and Agriculture 3 Hrs

(Pre req: ECN 1203) Explores global food and agricultural issues with a focus on hunger, chronic malnutrition, and diets of people in developing countries. Introduces basic economic concepts pertinent to understanding and analyzing global food markets and prices and to evaluating government policies designed to reduce food insecurity, enhance diets, and promote agricultural development.

MGT 2103 Management Concepts 3 Hrs

(Pre req: ECN 1203, ACT 1103 or ABM 2963) This course is a study of the basic principles of management decision-making as applied to agricultural business operations. Emphasis will be placed on the importance of relevant data (such as business costs and returns, cash flow, income statement and balance sheet) in making informed business decisions. Differences in management goals will also be explored.

MGT 2503 Human Resource Management 3 Hrs

(Pre req: MGT 2103) This course includes a study of the recruitment, selection, training and utilization of human resources, including recruitment, worker's compensation, unemployment insurance, benefits and safety in the work place.

MKT 2103 Retail Marketing 3 Hrs

This course is designed to provide the student with a basic understanding of the functions necessary in the retail marketing of products and services. The advantages of understanding the complex marketing system is emphasized.

MKT 2203 Ag Marketing 3 Hrs

(Pre req: ECN 1203) This class deals largely with all the risk management aids available to the agricultural producer. Topics include the use of commodity markets, storing, computer programs, market information, and government programs.

SPC 1103 Sales Communications 3 Hrs

This course will instruct students in retail and service salesmanship, emphasizing the purpose of selling, the characteristics and functions of the salesperson, sales promotion, locating and qualifying prospects,

and the steps in making a sale. Students are required to select a product, develop a sales manual and make a sales presentation.

APS ANIMAL SCIENCE/AG EDUCATION

AED 1023 Interpersonal Skills for Leadership 3 Hrs

Introduction to the principles and practices of positive interpersonal relationships for leadership development. Self-awareness, awareness of others, effective interpersonal communication, and the building of trust relationships as a basis for understanding and developing leadership. An experiential approach, field projects and a supervised service project.

AED 1103 Intro to AgriScience Education 3 Hrs

Required of all Ag Ed Departmental majors. Observing and/or performance of professional skills in agricultural education, journalism and leadership focusing on agribusiness, industry training positions, secondary agricultural education instruction, extension education, advertising, public relations, broadcasting, news-editorial and international agricultural education.

AED 1233 Planning Leadership & Experiential Programs 3 Hrs

Theory of experiential education to middle school and secondary agricultural education programs, especially leadership and career education. Development of Supervised Ag Experience (SAE), Young Adult/Farmer, FFA and alumni activities, appropriate to the community, school and student needs using electronic technology in learning how to teach Nebraska's agricultural education financial management system. Students will learn the theory of experiential education with examples as development of an (SAE) Supervised Agricultural Experience, alumni activities and other community opportunities.

AED 2103 Youth Programs 3 Hrs

This course is designed to take a deeper look at youth programs across the country such as 4-H, FFA, FCCLA and many others.

AED 2503 Livestock Practicum 3 Hrs

This course is designed to assist students learn how to care and manage livestock (SAE) Supervised Agriculture Experience projects. The students will have the opportunity to work cattle, sheep, swine and goats from selection to show.

ASI 1011 Introduction to Animal Science 1 Hr

A course that deals with current issues facing the livestock industry, production trends, terminology, animal growth, structure & selection, breeds, and development.

ASI 1024 Fundamentals of Animal Biology 4 Hrs

Fundamentals of animal biology as it applies to the science of livestock production. Biological principles governing production and consumption of animal products are emphasized in both lecture and laboratory sessions.

ASI 1031 Rodeo Seminar-Rough Stock & Timed Events 1 Hr

A course for first year students designed to help the student practice all of the men's and women's National Intercollegiate Rodeo Association (NIRA) events. This course will be taught through actual practice, video review and guest lectures.

ASI 1203 Feedlot Operations 3 Hrs

(*Pre req: ASI 1253 & ASI 1303*). The main emphasis will be to discuss current trends, problems, or issues related to the feedlot industry. Each profit center of a feedlot will be studied through an internship with a local feedlot. The lab portion will include practical application of common health and processing procedures found in the feedlot industry. It will incorporate low-stress cattle handling, as well as safety procedures.

ASI 1213 Livestock and Carcass Evaluation 3 Hrs

This course is a comprehensive study of the evaluation of livestock, including beef, lamb, pork, and poultry, and their carcasses and products. This will include study of animal growth and development, measures of animal performance, and use of performance records for selection. Measures of carcass traits and monetary value as well as federal and industry product standards will be reviewed. The relationship to production economics will be considered for all selection processes.

ASI 1222 Advanced Livestock Evaluation and Judging 2 Hrs

(*Pre req: ASI 1213 or instructor permission*) An advanced course in livestock evaluation and judging designed to apply principles learned in ASI 1213. This course will teach and develop written and oral communication skills that enable the student to convey in a brief, concise presentation the results of their decisions. Logical and systematic decision making will be taught. This class will involve extensive field trips to livestock producers and travel to national livestock exhibitions. The livestock judging team will be selected from this class to represent NCTA at intercollegiate competitions.

ASI 1241 Ranch Horse I 1 Hr

A course for first-year students designed to help the student and their horse learn and practice the skills necessary to be successful in the Collegiate Division of the American Stock Horse Association (ASHA) which includes four events: Stock Horse Pleasure, Trail, Reining, and Working Cow Horse. NCTA was one of the founding institutions of the ASHA Collegiate Stock Horse Versatility Education Program which organizes many of the competitions for the year. Collegiate ASHA has three different rider skill levels which provide each student the opportunity to compete against others at the same skill level whether you are a beginning rider or an accomplished rider. NCTA has a limited number of school horses available by instructor approval. This course will be taught through actual practice, video review, and guest lecture/clinicians.

ASI 1253 Nutrition 3 Hrs

A study of water, carbohydrates, fat, protein, vitamins and minerals as they apply to animal utilization. Lab will include problems involving water, protein, and TDN in rations.

ASI 1263 Basic Equitation 3 Hrs

(*Pre req: ASI 1161 and ASI 1501*) This course is a study and application of basic equitation principles for the novice rider. Basic horse handling practices, safety issues, and adapting dressage maneuvers towards Western and English performance is emphasized.

ASI 1303 Animal Management 3 Hrs

Animal Management is a course that deals with current issues facing the livestock industry, production

trends, terminology, animal growth, structure, selection, breeds, and development. Principles of managing animals in typical production systems through their life cycle for economic and efficient production will also be studied.

ASI 1312 Livestock Judging I **2 Hrs**

(Pre req: ASI 1213 and ASI 1222) A continuation of ASI 1213.

ASI 1341 Ranch Horse II **1 Hr**

A course for second-year students designed to help the student and their horse practice and refine the skills necessary to be successful in the Collegiate Division of the American Stock Horse Association (ASHA) which includes four events: Stock Horse Pleasure, Trail, Reining, and Working Cow Horse. NCTA was one of the founding institutions of the ASHA Collegiate Stock Horse Versatility Education Program which organizes many of the competitions for the year. Collegiate ASHA has three different rider skill levels which provide each student the opportunity to compete against others at the same skill level whether you are a beginning rider or an accomplished rider. NCTA has a limited number of school horses available by instructor approval. This course will be taught through actual practice, video review, and guest lecture/clinicians.

ASI 1351 Artificial Insemination of Beef Cattle **1 Hr**

This course trains individuals in the techniques of artificial insemination of cattle.

ASI 1432 Equine Care **2 Hrs**

A study of the working horse, emphasizing utilization in the feedlot. Health, nutrition, and proper care of equipment will be covered. Animal safety as well as safety of personnel in the feedlot, will be evaluated. Common lameness problems and hoof trimming will be covered.

ASI 1442 Equine Practicum I **2 Hrs**

This course will introduce first year Equine Industry Management students to hands-on equine activities of care, feeding, grooming, and barn management. Students enrolled in this course will work at the horse barn with the NCTA horses.

ASI 1501 Equine Safety **1 Hr**

This horsemanship safety class will help develop safe habits for horse and rider when on the ground and in the saddle. A format of lectures and actual hands-on handling of horses both on the ground and in the saddle will be used.

ASI 1991 Independent Study **1 Hr**

(Pre req: Approval of project by Instructor, Division Chair, and Advisor) Individual or group projects in research, literature review, or extension of course work under the supervision and evaluation of a Major faculty member who is willing and available to contract with the student.

ASI 2031 Rodeo Seminar-Rough Stock & Timed Events **1 Hr**

A course for second year students designed to help the student practice all of the men's and women's National Intercollegiate Rodeo Association (NIRA) events. This course will involve actual practice and video tape review.

ASI 2203 Feeds and Feeding **3 Hrs**

(Pre req: ASI 1253 recommended) The study of feed-stuffs, feed processing, and feed additives. Lab will include feed evaluation, moisture determination and conversion, feed tag interpretation, ration evaluation, and balancing.

ASI 2303 Range Management **3 Hrs**

A study of pasture and range management as it applies to the production system. This class includes the identification of common range plants, and range sites along with determination of range condition from a plant survey. Balanced forage systems are studied including native range, introduced grass pastures, irrigated grass pastures, and the use of annual grasses and crop residues in livestock forage systems.

ASI 2312 Livestock Judging II **2 Hrs**

(Pre req: ASI 1312) A continuation of ASI 1312.

ASI 2313 Ration Formulation **3 Hrs**

(Pre req: ASI 1253, ASI 2203, AIT 1053 or permission) A continuation of Feeds and Feeding with an emphasis on ration balancing for specific classes of cattle and swine. Computer ration balancing will be used.

ASI 2332 Livestock Judging III 2 Hrs

(Pre req: ASI 2312) A continuation of ASI 2312.

ASI 2353 Livestock Breeding 3 Hrs

A course in the principles of genetics and hereditary characteristics applied to livestock production, including production records, selection, and design of mating systems.

ASI 2362 Advanced Equitation 2 Hrs

(Pre req: ASI 1263 or permission, limited enrollment)

This class addresses the study and application of equine and rider maneuvers basic to performance excellence. Students will be expected to show satisfactory progress toward standards of excellence in Western and English disciplines.

ASI 2363 Intermediate Training 3 Hrs

Students will acquire skills in intermediate horsemanship (including equitation and training techniques) and greenbreaking. Students, with the aid of the instructor, will set and achieve individual objectives.

ASI 2384 Large Animal Diseases & Pharmacology 4 Hrs

Students study the etiologies of animal disease as it relates to the major classes of domestic livestock. The study includes investigation of specific livestock diseases, disease control measures and basic sanitation parasite management, pharmacological principles, antibiotics, and fundamental immunology in domestic animals. Important zoonoses are covered along with the principles of Beef Quality Assurance.

ASI 2403 Monitoring Techniques & Data Analysis 3 Hrs

This course emphasizes the importance of keeping accurate range production records and how to gather, store and utilize data. It, also, includes an in-depth use of current monitoring techniques used to gather data on rangelands.

ASI 2412 Equine Marketing Techniques 2 Hrs

This class is designed to give students the experience of creating a sale from start to finish. It includes working with horses to creating the sale catalog.

ASI 2433 Equine Industry Management I 3 Hrs

A study of the light horse production with emphasis on nutrition, reproduction, management, and principle usage of light horses. Courses such as horse production, Equine care, Advertising and Merchandising opens doors to a variety of careers in the horse industry.

ASI 2442 Equine Practicum II 2 Hrs

This course will introduce second year Equine Industry Management students to hands-on equine activities of care, feeding, grooming, and supervisory barn management. Students enrolled in this course will work at the horse barn with the NCTA horses.

ASI 2443 Equine Industry Management II 3 Hrs

This course of study is designed for students who wish to pursue a career in horse production. The curriculum involves both classroom and applied study primarily aimed at the production aspect of the horse industry. At the end of the program students will be tested to demonstrate competencies needed for success in the chosen area of horse production.

ASI 2452 Seedstock Preparation and Marketing 2 Hrs

This course is designed to prepare students to address preparation of livestock to be marketed through seedstock and other marketing programs.

ASI 2462 Colt Starting 2 Hrs

(By Permission) This course is an application in basic colt starting principles for the advanced rider. Basic young horse handling practices and safety issues will be studied and applied.

ASI 2463 Advanced Performance Training 3 Hrs

Students will acquire skills in the correction of bad habits and advanced training techniques leading toward an area of specialization. Students, with the aid of the instructor, will set and achieve individual objectives.

ASI 2513 Meat Science 3 Hrs

(Pre req: ASI 1303) This course covers physical and chemical aspects associated with structure and composition of meat. Conversion of muscle to meat and principles relative to fresh and processed meats, storage,

microbiology, palatability, and nutritive values will be discussed in depth. Hormonal influence on growth, development, and final product will also be covered.

ASI 2604 Livestock Anatomy and Physiology 4 Hrs

Livestock Anatomy and Physiology is a combined lecture and laboratory course dealing with the anatomy and physiology of common domestic livestock. The course studies basic tissues utilizing a systems approach to the organs of the body. Also a review of basic cellular biology with the intent of applying it to individual organ tissues is covered.

ASI 2612 Equine Reproduction 2 Hrs

A study of the anatomy and physiology of the stallion and mare, the hormones of reproduction, and breeding systems and methods, including artificial insemination. The student will also be introduced to breeding farm management.

ASI 2753 Beef Production Systems & Lab 3 Hrs

(Recommended pre req: ASI 1253 & ASI 2203) The economics, breeds, selection, nutrition, breeding, and management of beef cattle. About 20% of the course will be lab.

ASI 2773 Advanced Reproductive Physiology 3 Hrs

(Pre req: ASI 2604 or VTS 1404 or Instructor Permission) The objective of this course is to promote an understanding of reproductive processes in domestic animal. The students will understand the processes of reproduction in the various livestock species.

ASI 2854 Farm and Ranch Management 4 Hrs

(Pre req: ACT 1103, MGT 2103) Business management concepts which are involved in the decision-making process when organizing and operating a farming/ranching operation. Includes production economics, record keeping systems, financial budgets and analysis, crop and livestock enterprise analysis, depreciation, cash flow planning equity, and production efficiency indicators.

ASI 2864 Nebraska Ranch Practicum 4 Hrs

(Pre req: Advisor permission only) The Nebraska Ranch Practicum is a three-season, hands on educational program designed to give the participants the skill and education needed in today's complex ranching

industry. This unique class consists of eight, day long sessions, from June through January held at the West Central Research and Extension Center in North Platte and the Gudmundsen Sandhills Laboratory near Whitman, Nebraska. Students must register for this class as well as apply and be accepted into the program. This application is available at www.panhandle.unl.edu/ranchpracticum.

ASI 2906 Internship 6 Hrs

(Pre req: Approval by Division Chair) The internship provides job experience in your field of study at an approved work location. Official agreements are entered into between the student, employer, and the college. Full-time employment for 2 weeks is equivalent to 1 credit hour. A written journal plus an oral presentation required upon returning from internship.

ASI 2992 Independent Study 2 Hrs

(Pre req: Approval of project by Instructor, Division Chair, and Advisor) Individual or group projects in research, literature review or extension of course work under the supervision and evaluation of a Major faculty member who is willing and available to contract with the student. The student will present his/her independent study proposal to the Major Division Chair and faculty for their approval.

AG EQUIPMENT

AEQ 1103 Small Engines 3 Hrs

A complete course in gasoline engine operation. It consists of operational theory and nomenclature including the internal components and its air, fuel, lubrication, and cooling system. This course will emphasize small and multi-cylinder gas and diesel engines.

AEQ 1153 Equipment Principles 3 Hrs

Students will be exposed to the basic principles of agricultural equipment including power trains, hydraulics, fuel systems and electricity. Alternative devices will be studied.

AEQ 1171 Farm Equipment Safety 1 Hr

An orientation into the safe operation of tractors, combines, balers, skid loaders, and other common farm equipment. Students will be expected to demonstrate their ability to safely operate several types of equipment.

AEQ 1172 Industrial Safety 2 Hrs

Included are standard industry practices, job hazards, and emergency procedures. Students will prepare to pass the CPR/First aid exam and learn standard OSHA guidelines.

AEQ 1203 Welding 3 Hrs

Designed to acquaint students with basic skills and procedures of arc, oxyacetylene, and wire feed welding. Included will be hard surfacing, cutting and the welding of aluminum.

AEQ 1213 Turf Equipment Maintenance 3 Hrs

Students study turf management equipment with an emphasis on the diagnosis and repair of malfunctioning equipment. Topics also covered will be the study of the principles and practices of sharpening tools and equipment used in turf management operations. Emphasis will be placed on reel adjustments and grinding and lapping cutting blades for mowing equipment.

AEQ 1313 Intermediate Welding 3 Hrs

(Pre Req: AEQ 1203 or equivalent) This course will focus on gas tungsten arc welding, machining, metals and metallurgy, and special welding and cutting processes. Steels, stainless steels, cast iron, cast aluminum, and aluminums will be covered in-depth. Safety will be emphasized. Welding Technology Fundamentals text book is required, along with safety glasses, and welding gloves.

AEQ 1501 Introduction to Electric Code 1 Hr

Introduction to Nebraska state electrical law and the National Electric Code as they pertain to the working electrician.

AEQ 1503 DC Circuit Analysis 3 Hrs

Fundamentals of DC electricity as applied to series, parallel, and series-parallel circuits. Diagnosis and troubleshooting of circuits with test equipment.

AEQ 1513 AC Circuit Analysis 3 Hrs

Fundamentals of AC electricity including alternating current theory, waveform quantities and characteristics, and network analysis. Diagnosis and troubleshooting simple circuits with proper test equipment.

AEQ 1523 Industrial Electricity 3 Hrs

Electrical theory and application, electrical blueprints, power sources, panels control devices, motors, etc. Diagnosis and troubleshooting with proper test equipment.

AEQ 1651 Harvest Operations 1 Hr

The course will primarily focus on grain harvest operations. Grain combine setup and operation will be emphasized. Students will gain an understanding of factors influencing harvest efficiency including estimating harvest losses. Combine yield monitor operation will also be included.

AEQ 1713 Carpentry 3 Hrs

Learning basic tools and techniques of carpentry as it would pertain to a farm and ranch, including selection, use and maintenance of hand and power tools; selection of wood construction materials; construction of joints; application of finishes; and using these basic skills to follow a plan in the construction of a functional project.

AEQ 2103 Ag Chemical Applicator 3 Hrs

An introduction to the systems, major equipment and supporting components required for chemical application in agricultural production.

AEQ 2211 Hydraulics 1 Hr

Basic study of hydraulic concepts, applications, and operation as applied to power equipment systems. This class also includes study of the diagnosis of power equipment with the emphasis on hydraulic problems.

AEQ 2214 Advanced Welding 4 Hrs

(Pre Req: college credit welding course or instructor permission) The students will build a metal project by using various welding, cutting, and lathe machining operations. Students will prepare a scaled blueprint, bill of materials, and an estimated cost. Instructor approval of the project is required.

AEQ 2301 Pesticide Certification 1 Hr

Students will prepare for certification as a commercial pesticide applicator. A foundation for the safe and effective use of pesticides will be emphasized.

Upon completion, students will schedule and complete a certification testing session.

AEQ 2303 Equip. Preventive Maintenance 3 Hrs

A study of economic principles and principles of operation, adjustments, repair, maintenance, and tune-up of farm vehicles (automotive, tractors, and powered farm equipment vehicles).

AEQ 2323 Precision Farming Technology 3 Hrs

A course designed to acquaint students with the basic skills of farm map creation, GPS hardware components, software choices, decision making skills and application of GPS/GIS in the agriculture industry for improved crop management and protection of the environment.

AEQ 2333 Parts Management 3 Hrs

This course will emphasize the use of computers and microfiche in parts inventory systems along with the various parts ordering classifications and the effect on profitability.

AEQ 2404 Mechanized Irrigation Systems 4 Hrs

Fundamentals of mechanized irrigation systems focusing on center-pivot components. Technical service and operation will be emphasized. Application of industrial electrical components and controls.

AEQ 2413 Diesel Engines 3 Hrs

A study of cost effective maintenance programs for agriculture power equipment. Included is nomenclature, operational theory, adjustment and maintenance of agriculture gasoline and diesel engines. Lab includes the disassembly of a diesel engine.

AEQ 2604 Welding Apprenticeship 4 Hrs

(Pre req: approval by Division Chair) The apprenticeship provides job experience in your field of study at an approved work location. Official agreements are entered into between the student, employer, and the college. The internship must last a minimum of 8-weeks averaging at least 40 hours per week. A written journal of daily work activities plus a 10 minute PowerPoint presentation are required upon completion. Students must submit a list of learning objectives prior to the apprenticeship and include discussion

of these within their presentation. The student and employee will also complete a survey at the conclusion of the apprenticeship.

AEQ 2801 Reinke Certification 1 Hr

Students will complete the Reinke Platinum PLUS Certified Technician training program. The course is an on-line training program developed by Reinke with integrated exams at the end of each training module. Students will be expected to complete the training sessions on their own time; however, faculty assistance will be available. To receive a Pass for the course, students must meet performance standards established by Reinke.

AGRONOMY

AGR 1001 Ownership Advantage Seminar I 1 Hr

An orientation course to the 100 Beef Cow and 100 Acre Farm Ownership Advantage Programs. Students will be introduced to USDA beginning farmer and rancher programs. Students will also develop their long term goals and layout their plan for reaching these goals. A PowerPoint will be developed to explain their plan in an oral presentation given to the class.

AGR 1091 Crop Practicum I 1 Hr

This is the first course of a 3-course sequence that integrates students into the crop production on NCTA's farm laboratory. Students will work as a team to develop a crop management plan for one of NCTA's crop fields. The plan will include actual production practices, budgeting and marketing of the harvested crop. Crop planting and harvest will be conducted by the students and possibly some ag chemical applications. Due to farm size limitations, the practicum courses will be limited to just Agronomy majors.

AGR 1103 Crop Science 3 Hrs

Students will develop a global understanding of the food, feed, and fiber system. Crop production strategies to maximize yield and quality while sustaining resources and the environment will be emphasized. Principles of crop growth and development, pest management and technology for crop production will be covered.

AGR 1112 Agriculture Applications Business Basics 2 Hrs

This course is designed to provide students enrolled in the Agriculture Application Certificate Option with basic skills required for managing personal and business finances. Topics covered include: managing personal finances, budgeting for a farm, ranch, or small business, basic record keeping for the farm, ranch or small business, or personal accounts; basic computer applications used in a business setting including MS Word and Excel.

AGR 1116 Ag Applications 6 Hrs

This course is designed for students to gain experience in handling conditions on the farm daily. Students will receive hands on experience.

AGR 1201 Principles of Soils Lab 1 Hr

Laboratory activities dealing with physical, biological and chemical properties of soils that support plant growth.

AGR 1203 Principles of Soils 3 Hrs

A study of soil formation, physical, biological and chemical properties of soil with attention given to conditions that affect plant growth. Impacts of crop management on soil quality will be emphasized.

AGR 1213 Natural Resource Management 3 Hrs

A study of our natural resources with special emphasis on soil and water management including land classification, conservation practices, and protection methods used to conserve our natural resources, plus the role of government agencies in Natural Resource Management.

AGR 1501 Ownership Advantage Seminar II 1 Hr

(Pre req: AGR 1001 Ownership Advantage Seminar I). This course is intended for 2nd semester 100 Beef Cow and 100 Acre Farm Ownership Advantage Program students. Topics to be explored include: Farm/Ranch transitions, legal documents for the farm/ranch business organization, working with family members, and working with loaning institutions. Potential partners for their farm/ranch operation will be identified.

AGR 1591 Crop Practicum II 1 Hr

This course is the second of a three course sequence that will be required for all agronomy majors. The 3-course practicum sequence will provide another direct assessment of the agronomy program learning outcome of "applying economically sound and environmentally sustainable agriculture crop production practices." The practicum courses will also increase student utilization of the college's farm laboratory.

AGR 1891 Crops Judging I 1 Hr

This course will cover all principles of agronomy to prepare students to compete in crops judging contests that operate under the North American Colleges and Teachers of Agriculture (NACTA) contest guidelines.

AGR 1991 Independent Study 1 Hr

(Pre req: Approval of project by Instructor, Division Chair, and Advisor) Individual or group projects in research, literature review, or extension of course work under the supervision and evaluation of a Major faculty member who is willing and available to contract with the student.

AGR 2001 Ownership Advantage Seminar III 1 Hr

(Pre req: AGR 1501 Ownership Advantage Seminar II) This course is intended for 3rd semester 100 Beef Cow and 100 Acre Farm Ownership Advantage Program students. Concepts in marketing and farm/ranch business plan development will be emphasized. Students will begin the process of developing a business plan to later be completed in the APS Capstone course. Students will also develop a plan to transition into their own farm/ranch operation.

AGR 2002 Wildlife Habitat Management 2 Hrs

A course that studies the most common Nebraska Wildlife species that are managed for harvest throughout the state. The habitat requirements and management techniques for each wildlife species will be covered. Current wildlife habitat support programs will be reviewed.

AGR 2091 Crop Practicum III 1 Hr

(Pre req: AGR 1591 Crop Practicum II). This is the third course of a 3-course sequence that integrates students into the crop production on NCTA's farm

laboratory. Students will work as a team to develop a crop management plan for one of NCTA's irrigated crop fields. The plan will include actual production practices, budgeting and marketing of the harvested crop. Crop planting and harvest will be conducted by the students and possibly some ag chemical applications. Due to farm size limitations, the practicum courses will be limited to just Agronomy majors.

AGR 2103 Building Construction 3 Hrs

A study of materials, techniques, and design used for farm and ranch facilities. Lab time will include the construction of Ag building, fences, and facilities on the NCTA campus.

AGR 2153 Organic Food Production 3 Hrs

An introduction to the history, definitions, principles, and practices of organic food production. Topics include soil husbandry, integrated pest management, farming systems including diversified vegetables, perennial fruit, agronomic field crops, meat, egg, and milk production, organic certification, and marketing.

AGR 2201 Commercial Agriculture Carrier Training 1 Hr

(Pre req: Must be a full time NCTA student) A course of study designed to enable students to successfully obtain their CDL with all necessary endorsements. This course of study targets agricultural employees and producers. It is not intended for those seeking fulltime employment as commercial truck drivers.

AGR 2203 Alternate Agriculture Enterprises 3 Hrs

Discussion centered around development of alternative enterprises involving agriculture. Agri-tourism potential to various areas of Nebraska will be explored.

AGR 2304 Soil Fertility 4 Hrs

Dynamics of essential plant nutrients in the soil environment. Sustainable and profitable fertility management of agronomic and horticultural crops will be emphasized. Characteristics of the fertilizer materials, fertilizer application methods and fertilizer rate calculations will be covered.

AGR 2354 Pest Management 4 Hrs

Identification of plant pests, including morphology and life cycles of selected insects, weeds, and diseases. Pest control methods include chemical, physical, mechanical, cultural, and biological techniques. Issues such as pesticide laws and regulations, record keeping, labels, storage, and safety are discussed. Application of integrated pest management will be stressed.

AGR 2383 Irrigation Management 3 Hrs

Efficient irrigation management strategies of agronomic crops. Irrigation techniques, irrigation scheduling, equipment selection, and water use regulations will be covered. Sustainable utilization of our water resources will be emphasized.

AGR 2404 Crop Management 4 Hrs

A study of cultural practices for crops in the Midwest to maximize productivity and sustainability. Seed selection, production, drying and storage will also be studied.

AGR 2714 Farm Beginnings 4 Hrs

The Farm Beginnings® Program consists of a series of sessions offered throughout the year by Nebraska Extension with cooperation from NCTA. The sessions focus on alternative agriculture and cover a variety of topics, including building networks, goal setting, whole farm planning, building your business plan, marketing, business and farm management and financial management. In addition to learning first-hand from successful farmers, participants will develop their own business plan as they progress through the course.

AGR 2892 Crops Judging II 2 Hrs

This course will cover all principles of agronomy to prepare students to compete in crops judging contests that operate under the North American Colleges and Teachers of Agriculture (NACTA) contest guidelines.

AGR 2903 Internship 3 Hrs

(Pre req: approval by Division Chair) The internship provides job experience in your field of study at an approved work location. Official agreements are entered into between the student, employer, and the college. The internship must last a minimum of 8-weeks

averaging at least 40 hours per week (NOTE: students must honor length agreed upon by employer). A written journal of daily work activities plus a 10 minute PowerPoint presentation are required upon returning from internship. Students must submit a list of learning objectives prior to the internship and include discussion of these within their presentation. The student and employee will also complete a survey at the conclusion of the internship.

AGR 2943 Farm and Ranch Capstone 3 Hrs

(*Pre req: Second year students only in their last semester before graduation.*) This is a Capstone course for students intending to own and operate their own farm or ranch. A business plan will be completed including: facility design, management plan, marketing plan, and complete financial package for the proposed operation including a cash flow, net worth, and budget.

AGR 2992 Independent Study 2 Hrs

(*Pre req: Approval of project by Instructor, Advisor, and Division Chair*) Individual or group projects in research, literature review or extension of course work under the supervision and evaluation of a Major faculty member who is willing and available to contract with the student. The student will present his/her independent study proposal to the Major Division Chair and faculty for their approval.

HORTICULTURE

HSL 1001 Careers in Horticulture 1 Hr

Introductory course covering the many career paths available to students interested.

HSL 1022 Introduction to Art 2 Hrs

An introductory design course to explore the elements of design graphics as well as basic design terminology. Several graphics methods will be used to develop an understanding of different styles and medias. The use of line, form, color, rhythm, repetition, scale, symmetry, and texture will be studied. Students will begin to build upon the larger design process for future landscape design courses.

HSL 1053 Landscape Appreciation 3 Hrs

An appreciation for the landscape from large to small will be discussed. Large players in landscape perceptions world-wide will be explored as well as the ways in which people historically have interacted with the landscape.

HSL 1073 Landscape Plants I 3 Hrs

Identification, characteristics and uses of woody ornamentals, including deciduous and evergreen trees and shrubs, as well as ground covers and vines. Selection of plant materials for selected sites included.

HSL 1103 Plant Propagation 3 Hrs

Hands on introductory course covering the scientific principles of the various types of plant propagation. Activities involve practical application of scientific principles and all students will be required to complete projects.

HSL 1173 Landscape Plants II 3 Hrs

Identification, characteristics and cultural requirements of greenhouse foliage plants, flowering plants, annuals, perennials, bulbs, ornamental grasses, and outdoor ferns. Flowerbed design principles and interior plantscaping concepts discussed and practiced.

HSL 1251 Irrigation Systems Mgt. 1 Hr

Class shall cover the basic fundamentals involved in irrigation system installation and maintenance. Specific information about selecting heads, pipes, pumps, hydraulics, and automated control systems.

HSL 2003 Internship 3 Hrs

(*Pre req: approval by Division Chair*) The internship provides job experience in your field of study at an approved work location. Official agreements are entered into between the student, employer, and the college. The internship must last a minimum of 8-weeks averaging at least 40 hours per week (NOTE: students must honor length agreed upon by employer). A written journal of daily work activities plus a 10 minute PowerPoint presentation are required upon returning from internship. Students must submit a list of learning objectives prior to the internship and include discussion of these within their presentation. The student and employee will also complete a survey at the conclusion of the internship.

HSL 2044 Intro to Landscape Design 4 Hrs

(Pre req: HSL 1022) An introductory course to the elements and principles of landscape design and the landscape design process. Students will assess landscape plants for design requirements and develop graphic communication skills as they relate to landscape graphic presentation. Actual landscape problems will be considered. Students will prepare and present a design proposal for an actual residence.

HSL 2103 Computer-aided Landscape Design 3 Hrs

(Pre req: HSL 2044) An exploration of computer-aided drafting. Students will become familiar with the use of DynaScape Design and DynaScape Color programs, which use CAD as their drafting engine. Students will enhance design skills while taking advantage of computer-based design software.

HSL 2143 Landscape Construction 3 Hrs

Principles of landscape construction are covered as well as cost estimating and bidding. Issues such as design, planning, and installation will be emphasized for areas such as landscape beds, erosion control, retaining walls, cement borders/walks, fences and walls, and other general landscape projects.

HSL 2181 Independent Study 1 Hr

(Pre req: Approval of project by Instructor, Division Chair, and Advisor) Individual or group projects in research, literature review, or extension of course work under the supervision and evaluation of a faculty member who is willing and available to contract with the student. A student is expected to complete a minimum of 32 hours of research, lab, or field work (excluding homework and completion of assignment). At the instructor's discretion, a student may also be required to keep a daily journal. At the conclusion of the independent study, the student will submit a written report detailing their research or learning experience. The student will also deliver a 20 minute PowerPoint presentation to NCTA faculty, staff, and students.

HSL 2213 Horticulture Capstone 3 Hrs

(Pre req: Second year students only in their last semester before graduation) An advanced course dealing with "Green Industry" career oriented subject matter. Students will develop a capstone project that reflects

their horticultural specialization. The project will be supported by past academic studies, data/research materials, and outside Green Industry groups; and will include a full management plan including financial analysis. Students are required to submit and report the completed project to an advisory panel selected by the capstone advisor.

HSL 2262 Independent Study 2 Hrs

(Pre req: Approval of project by Instructor, Division Chair and Advisor) Individual or group projects in research, literature review or extension of course work under the supervision and evaluation of a faculty member who is willing and available to contract with the student. A student is expected to complete a minimum of 64 hours of research, lab or field work (excluding homework and completion of assignment). At the instructor's discretion, a student may also be required to keep a daily journal. At the conclusion of the independent study, the student will submit a written report detailing their research or learning experience. The student will also deliver a 20 minute PowerPoint presentation to NCTA faculty, staff, and students.

HSL 2283 Landscape Management 3 Hrs

A detailed discussion and practice of the maintenance tasks of trees, shrubs, ground covers, turf, roses, annual and perennial flowers as well as other seasonal management practices.

HSL 2314 Nursery and Greenhouse Production 4 Hrs

Covers principles of both greenhouse and nursery production and management as well as industry standards. Includes types of greenhouse structures, glazing materials, heating, cooling, and watering systems, cropping systems, soil media, fertilization, greenhouse environmental control systems, pest control, production schedules, crop handling, nursery stock care, garden center management, marketing, and laws. The commercial production of major bedding plant crops and nursery stock shall be promoted.

HSL 2322 Organic Horticulture 2 Hrs

An advanced production class focused on new and innovative ways to produce traditional horticulture crops. This course will look at existing methods of

creative production and the challenges each of these may encounter. A focus will also be made on understanding how production demand follows cultural needs. The combination of the high tunnel, traditional field production, and many case studies will be used.

HSL 2324 Farmer's Market 4 Hrs

An advanced course displaying production from farm to market. Business and entrepreneurial skills as well as production and marketing techniques will be learned. A Farmer's Market will be an active portion of this course and actual products will be sold.

HST 1113 Fund of Turf Management 3 Hrs

Identification of grass plant species, culture and morphology; turf ecology with practical information on turf establishment, and cultural practices.

HST 2353 Pest Management 3 Hrs

Identification of plant pests, including morphology and life cycles of selected insects, weeds, and diseases. Pest control methods include chemical, physical, mechanical, cultural, and biological techniques. Issues such as pesticide laws and regulations, record keeping, labels, storage, and safety are discussed. Application of integrated pest management will be stressed.

VETERINARY TECHNOLOGY SYSTEMS

VTE 1021 Basic Dog Grooming 1 Hr

(Lab 1 hr) Basic Dog Grooming provides an introduction to professional grooming. The entire process will be demonstrated and practiced. It includes prepping, bathing, drying, grooming, cuts, and finishing. Creative grooming patterns for mixed breeds and purebreds are taught. An introduction to the dynamics of running a successful pet grooming business is included.

VTE 1403 Anatomy and Physiology (Lecture) 3 Hrs

This on-line class studies basic body systems at the tissue, organ and system levels. Comparison of various species of common domestic animals is stressed. Student must have a grade of at least 70% in VTE 1403 and VTE 1301 to use as a pre-requisite course.

VTE 1512 Animal Care 2 Hrs

This on-line survey course introduces the student to canine and feline husbandry, including restraint, behavior, species and breed identification, basic technical techniques and the human-animal bond. Humane animal care and management is emphasized. The care, handling, nutritional needs, basic nursing skills, normal values, administration techniques, basic grooming, obtaining objective patient data and venipuncture for sample collection are included. Effective and appropriate restraint techniques are stressed. This class does not include a hands-on lab. To take Nursing I, this class and the hands-on lab class must be completed with a 70% or above.

VTE 1542 Facility Management I 2 Hrs

(2 hr field) Students study the management of animal holding facilities and the implementation of accepted animal welfare practices. Each student will participate in weekly kennel rotations providing the opportunity to care for all animals involved in the veterinary technology program. This includes weekend care and is a prerequisite for Nursing II.

VTE 1611 Concepts in Bits 1 Hr

Students explore theories and designs of bits in relation to mouth anatomy and discipline functions. History of bits to current industry trend will be explored with the goal of students gaining a thorough understanding of what a bits role is in riding.

VTE 1621 Calving Rotation I 1 Hr

(Pre req: VTS 2532 Lg Animal Techniques, VTS 2593 Nursing II) Students observe and assist in calving or lambing (if available). Opportunities are available at a variety of sites. Necropsy and various other experiences may present themselves. Enrollment limited.

VTE 1623 Equine Laboratory Diagnostics 3 Hrs

(Pre req: VTS 1603 Intro to Laboratory Science.) This course will help familiarize students interested in equine health with a variety of tests and equipment available for equine diagnostics. Complete blood counts, biochemical tests, urinalysis and other evaluation techniques will be discussed and practiced in this course.

VTE 1631 Practical Skills 1 Hr

(Pre req: Equine Safety.) This course will familiarize students with commonly used hands-on-skills expected in an animal agricultural setting. Equipment operation and maintenance considerations will be included as well as livestock related procedures. Safety will be emphasized throughout the course. Limited enrollment.

VTE 1633 Equine Diseases & Pharmacology 3 Hrs

In this course students study the causes of equine diseases and the principles of preventive veterinary medicine pertaining to equine. Study includes investigation of specific diseases and disease control measures as well as parasite management in the equine. Important zoonoses are covered. The course includes dosage calculations, and a survey of the common drug types used in equine medicine. Adverse drug reactions are discussed, labeling and packaging requirements, handling and storage of hazardous material and controlled drugs, preparing medications and vaccines, appropriate routes and methods of drug and vaccine administration are included.

VTE 1643 Equine Health Records 3 Hrs

This course will introduce students to the paperwork and record keeping associated with the horse. Medical records, breeding records, registrations, coggins papers, insurance applications, health permits for transportation to events and across state lines and other equine related record keeping will be included in the course. Equine law applications and business issues are introduced as well.

VTE 2011 Lifelong Learning I 1 Hr

Continuing education topics designed for Veterinary Technicians to meet continuing education licensing requirements. This class may be repeated for additional CE hours and can be taken by technicians, assistants, and veterinary technology students.

VTE 2031 Emergency Medicine 1 Hr

(Pre req: Nursing I with at least 80%) Students observe and assist in emergency care at an emergency clinic for a minimum of 40 hours.

VTE 2081 Lifelong Learning II 1 Hr

Continuing education topics designed for Veterinary Technicians to meet continuing education licensing requirements. This class may be repeated for additional CE hours and can be taken by technicians, assistants, and veterinary technology students.

VTE 2021 Special Interest 1 Hr

(Pre req: VT faculty permission) In this elective class, the student pursues a subject of special interest to them. It may include but is not limited to research and/or group tours. The project is developed under the supervision and evaluation of a faculty member who is willing and available to contract with the student.

VTE 2032 The World of Work 2 Hrs

(Pre req: VT faculty permission) Course involves a minimum of 80 hours of field experience at an approved location. This study is tailored to the needs of an individual. Statement of objectives will be required and progress notes will be checked. This class is developed by the student and under the supervision and evaluation of a faculty member.

VTE 2041 Making a Difference 1 Hr

Make a difference in the lives of hundreds of unwanted animals. Do 40 hours of volunteer work at a humane society or animal shelter and receive college credit. Enrollment is limited.

VTE 2101 Dog Training 1 Hr

This course includes principles and rationale of canine training. Basic behavior, exploration of techniques and basic training goals are included. Limited enrollment.

VTE 2121 Advanced Dog Training 1 Hr

(Pre req: Basic Dog Training) This course is a continuation of the Basic Dog Training class. While structured to meet the needs of the dogs and handlers, the goal is to explore more advanced understanding of canine behavior and training for work such as agility, stock dog or service.

VTE 2322 Intro to the Vet Office 2 Hrs

This on-line class provides an introduction into the Veterinarian's office and the knowledge essential for working in this position. It focuses on the terminology

used in the clinic that is important for communication with clients, technicians, and veterinarians. Terminology expands into knowledge of areas such as infectious diseases, surgery, client relationships, animal care, and vaccinations.

VTE 2342 Spanish for Animal Health 2 Hrs

A beginning Spanish course to help one become familiar with terms used when working with people and animals in agriculture and animal health.

VTE 2422 Hills Small Animal Nutrition 2 Hrs

This on-line course is an introductory course for students accepted in the veterinary technology program providing identification and function of nutrients, understanding pet food labels, and applications for wellness, life stage, and therapeutic nutrition (prescription foods) for dogs and cats.

VTE 2423 Canine & Feline Nutrition 3 Hrs

This on-line basic nutrition course takes into account the nutritional life cycles, diseases processes that diet can affect, feeding styles, nutritional excesses and deficiencies.

VTE 2522 Exotic Pet Selection and Care 2 Hrs

This on-line course is designed to introduce students to the selection decisions and overall concerns of owning common exotic animal pets. Specifics about animal species, housing and nutrition requirements as well as expectations of pet behavior and interaction will be addressed within the course.

VTE 2532 Bird Behavior and Training Methods 2 Hrs

This course will introduce students to the basics of bird behavior that influences training methods. The goal of the course is to help students of veterinary technology practice the best care for birds coming into the clinic by providing birds with cooperative skills via training methods. The philosophy of training without force and utilizing reinforcement will be discussed and used within the class.

VTE 2542 Walk on the Wild Side 2 Hrs

(Pre req: Enrollment in Veterinary Technology) Learn about the untamed side of veterinary technician medicine. Discover the positive impact Zoos and Wildlife Rehab centers can make. Work with endangered and

rescued animals. Observe the business side of these operations. Do 80 hours of volunteer work at a zoo or wildlife rehab center and receive college credit. Enrollment is limited.

VTE 2553 Exotic Animal Care 3 Hrs

(2 hr lect & 1 hr lab) This course is designed as a continuation in learning to care for exotic animals that the veterinary technician may encounter in clinical practice, rehab centers or zoos. Species identification, housing requirements, nursing care, dietary needs, reproduction, and potential health problems and treatments will be discussed. Specific species studied varies depending on the interest of the class. Emphasis is usually placed on birds, reptiles, amphibians, small mammals, and alternative livestock species. The goal of this course is to provide the student with skills essential for entry-level positions as veterinary assistants and veterinary technicians working with non-domestic animals.

VTE 2573 Safari 3 Hrs

(Pre req for Vet Tech is Fur and Feather and Exotic Animal Care. Other divisions will select courses at the discretion of the area instructor). This course of study is intended for students with a special interest in wildlife and/or exotic animals. Students from other divisions may contribute to a special design based on their department goals or interests. With the guidance of the instructor, students plan the study trip to expand their knowledge in topics outside the scope of college courses. Prior to the "safari", students will set educational goals based on research pertinent to their trip. An open to the public presentation is developed following the experience and is intended to address their educational goals.

VTE 2611 Equine Reproduction 1 Hr

(Lab 1 hr) This course trains individuals in the techniques of Equine artificial insemination, semen collection, semen handling and shipping, as well as record keeping and various breed association requirements.

VTE 2613 Equine Surgery & Anesthesia 3 Hrs

(Pre req: Equine Diagnostics) (1 hr lec and 2 hr lab) This course will teach an understanding of and basic skills for operating room protocols and anesthesia. The class will cover anesthesia from standing

sedation, to basic and commonly used drugs and the anesthetist's responsibilities from induction, through surgery and recovery. Local and general anesthesia techniques and principles will be covered. The surgery portion will cover identification of common instruments, how to prepare them for sterilization, surgical prep and surgery suite management. This information will be presented through lecture, lab and field trips.

VTE 2621 Calving Rotation II 1 Hr

(Pre req: VTE 1621 Calving Rotation I) Students observe and assist in calving or lambing (if available). Opportunities are available at a variety of sites. Necropsy and various other experiences may present themselves. Enrollment limited.

VTE 2623 Feeding the Equine Patient 3 Hrs

This course will introduce students with an equine interest to the nutritional management of the equine patient. Diets and needs for specific classes of horses and the unique nutritional demands placed on horses during various disease processes will be included.

VTE 2631 Equine Dentistry as a Business 1 Hr

Support information for equine dentistry. Topics covered will include: equine nutrition, record keeping, marketing, and book keeping. Prepares students to begin an equine dentistry business. (This course is taken concurrently with Equine Dentistry.)

VTE 2632 Equine Dentistry II 2 Hrs

(Pre req: VTE 2634) (1 hr lec & 1 hr lab) A continuation of Equine Dentistry with the introduction and use of power tools emphasized.

VTE 2634 Equine Dentistry 4 Hrs

(Pre req: Must be a DVM, LVT, or a student who has completed 35 hours of an AVMA accredited program) (1 hr lec and 3 hr lab) Students gain understanding in theories and techniques of equine dentistry through lecture and lab instruction. Dentistry methods from basic floating to complete mouth balancing using hand tools, and incisor work will be covered. Equine restraint techniques for unsedated work as well as pharmacologically aided methods will be covered.

VTE 2643 Equine Nursing 3 Hrs

(Pre req: Intro to ASI 1011 Animal Science & ASI 1501 Equine Safety) This course provides information for veterinary technicians, veterinary assistants and equine health care students to enhance and focus their understanding of equine nursing concepts.

VTE 2743 Vet Tech Overview 3 Hrs

This course is designed to provide a comprehensive review of the field of veterinary technology. It is intended for students that have completed the veterinary technology program and need to review specific areas before entering the work force or sitting for the national veterinary technician exam.

VTE 2811 Ultrasound 1 Hr

(Pre-Req VTS 1404 Anatomy) The principles of ultrasound are studied. The student is introduced to basic equipment care and use. Procedures are performed on small and large animals.

VTE 2821 Radiation Safety 1 Hr

This course is designed for veterinary assistants who are working in a private practice. The course covers the dangers of radiation and how to protect our patients and ourselves from potential harm. Rules and regulations as they apply to veterinary assistants and technicians are reviewed and a clinic safety plan is developed. Successful completion of this course will allow the individual to meet the State of Nebraska's Radiation Safety requirements.

VTE 2933 Pain Management 3 Hrs

This short course covers physiology, assessment, ethical and social issues, farm animal issues, drug treatments, non-pharmacological treatments and alternative treatment all from the aspect of pain management. Training in the recognition and treatment of pain is key to the teaching of veterinary technicians to be effective advocates for their patients. The goal of this video course is to be a valuable resource in this accomplishment.

VTL 1113 Laboratory Animal Medicine I 1 Hr

Lectures and journal article driven discussions will help students acquire knowledge of topics with the goal of helping prepare students for AALAS certification as an Assistant Laboratory Animal Technician (ALAT).

Unique attributes of animal species that accommodate their involvement in particular research studies as models of human disease. Students will also gain an appreciation of animal welfare regulations, guidelines and accreditation standards for the care and use of laboratory animals in biomedical research.

VTL1122 Laboratory Animal Medicine II 2 Hrs

In this course, students will learn about skills that are useful for laboratory animal care technicians such as animal restraint and husbandry, rodent surgery, PCR, advanced imaging, and cell culture. Student further learn and implement many of these skills in a lab associated with the course. These topics are represented on AALAS's Laboratory Animal Technician (LAT) certification exam.

VTL 1133 Lab Animal Management 3 Hrs

This course addresses the unique aspects important in management of a research colony, such as personnel, quality control, emergency planning, and the management of animal use protocols. These topics are represented on AALAS's Laboratory Animal Technologist (LATg) certification exam.

VTS 1262 Laboratory Animal Internship 2 Hrs

(Pre req: Lab Animal Med II) This 4 week internship provides job experience in the laboratory animal medicine field at an approved work location. Internship may be done during school breaks that are of at least one week in length. Internship locations, agreements and objectives must be approved by the Division. Students will show progress toward completion of objectives through weekly reports and evaluations. Students are encouraged to carry their own medical, disability, and liability insurance.

VTS 1301 Medical Terminology 1 Hr

Medical Terminology introduces the student to basic words and word structure that are essential in reading and writing medical literature. This course is essential for anyone seeking a better understanding of veterinary medical and scientific terms.

VTS 1313 Math for Vet Techs 3 Hrs

This course is specifically designed to prepare students for the mathematics used on a daily basis in veterinary nursing as well as on state and national certification board exams. It includes concepts needed for computations in chemistry and veterinary clinical

practice classes. Major subject areas and exercises address conversions within a measurement system and between measurement systems. Computations taught in this course focus on single and multiple-step dosage problems and the diluting of stock solutions to desired concentrations.

VTS 1404 Anatomy and Physiology (Lecture and Lab) 4 Hrs

Basic body systems are studied at the tissue, organ and system levels. Comparison of various species of common domestic animals is stressed. Laboratory exercises include a study of the skeletal system and dissection of a typical mammal. This course is a prerequisite for many other Veterinary Technology courses.

VTS 1404 Anatomy & Physiology (On-Line) 4 Hrs

This on-line class is available only to off-campus students. Basic body systems are studied at the tissue, organ and system levels. Comparison of various species of common domestic animals is stressed. Laboratory exercises include a study of the skeletal system and dissection of dog and cat specimens. Availability of typical large animal organs for comparison is encouraged. The on-site instructor is responsible for lab instruction, grading of laboratory assignments and delivery of lab exams. The on-site instructor may develop an assignment(s) worth 50 points total to customize the class to their site. Exams over lecture material are delivered via blackboard. This course is best studied over a two semester time period. On-site instructor must feel comfortable with the material in order to assist students. Students cannot complete this course without an involved on-site instructor. Skeletal Lab, Dissection Lab and Lecture may be undertaken concurrently or one at a time. It is best to pursue lecture before Dissection Lab if not done concurrently. The Skeletal System power point may be helpful with the Skeletal Lab.

VTS 1511 Intro to Animal Science 1 Hr

A course that deals with current issues facing the livestock industry, production trends, terminology, animal growth, structure & selection, breeds and development.

VTS 1513 Animal Care 3 Hrs

This survey course introduces the student to canine and feline husbandry, behavior, species and breed identification, and the human-animal bond. Humane animal care and management is emphasized. The

care, handling, nutritional needs basic nursing skills, normal values, and administration techniques, basic grooming, obtaining objective patient data and venipuncture for sample collection are included. Effective and appropriate restraint techniques are stressed. Student must be able to lift and carry 50 lbs. to take this class. This is a lecture and lab class. A 70% or above in this class is required to take Nursing I.

VTS 1521 Production Animals 1 Hr

(Pre req: Intro to Animal Science.) (1 hr lab) Specific animal physiology of large and small farm animals is studied. The course includes an introduction to nursing procedures required in veterinary practice for farm animals. Safe and effective methods of controlling various kinds of animals are discussed and practiced in a combination lecture and hands-on laboratory format. Equine, bovine, caprine, poultry, and porcine are covered, as well as other species. Student must have a grade of at least 70% to use as a pre-requisite for Animal Management. There is a lecture and laboratory component to this class.

VTS 1542 Facility Management I 2 Hrs

(2 hr field) Students study the management of animal holding facilities and the implementation of accepted animal welfare practices. Each student will participate in weekly kennel rotations providing the opportunity to care for all animals involved in the veterinary technology program. This includes weekend care and is a prerequisite for Nursing II.

VTS 1603 Introduction to Laboratory Science 3 Hrs

Through the application of fundamental biology, students will survey the biological world in association with production animals, companion animals and human health. Topics include parasitology, hematology, cytology, urinalysis, bacteriology, cytology and virology as an overview of laboratory procedures. The goal of this course is to provide students with an introduction to the world of microbes as a foundation for an integrated approach to understanding and managing for optimal, as well as economic, animal health decisions.

VTS 1713 Pharmacology & Anesthesia 3 Hrs

This course includes the study of pharmacokinetics, pharmacodynamics, dosage calculations, and a survey of the common drug types used in veterinary practice. Adverse drug reactions are discussed.

VTS 1822 Radiology I 2 Hrs

(Pre req: 18 years of age and Anatomy) The student is presented with an overview of radiation safety, machine operation and maintenance, patient positioning, radiographic film exposure, manual developing, care of darkroom equipment, evaluation of x-ray quality, and correction in techniques for producing a film the veterinarian can use for diagnostic purposes. The laboratory portion is spent applying radiation safety principles and positioning of animals for radiography using various x-ray machines. Correct darkroom techniques are emphasized for manual development systems. This class includes a lecture and lab component.

VTS 2241 Career Strategies (P) 1 Hr

This course provides preparation for future employment. Students will develop a cover letter and resume, review OSHA standards, and learn about types of performance reviews common in the work place. Goal setting skills will be sharpened by developing objectives and a way to accomplish them as well as a measure for recognizing success in each area chosen. Students will develop job seeking skills as they locate an internship site.

VTS 2243 Veterinary Technology Internship 3 Hrs

(Pre req: Completion of or enrolled in Career Strategies and a CGPA of 2.0 or higher). The internship is for a period of 8 weeks. Internship may be done during school breaks that are of at least one week in length or upon completion of all course work. Internship locations and agreements must be approved. For the Veterinary Technician Option internship must be done with a supervising veterinarian or veterinary technician designated by the veterinarian. Agreements may include more than one site. Official agreements are entered into between the student, the employer, and the college. Students identify learning objectives, design a methodology to accomplish them during the internship and must show substantial progress toward completion of these goals through weekly reports, pictures and evaluations. Students are encouraged to carry their own medical, disability, and liability insurance.

VTS 2331 Clinical Practices**1 Hr**

(Pre req: *Parasitology, Radiology I or Radiation Safety Short Course and Nursing I*) This class provides practical experience and preparation for working in veterinary clinic setting. The students will be working in the Dr. Walter Long Veterinary Technician Teaching Clinic where basic technician based services are offered to the clinic clientele consisting of NCTA student, faculty and staff owned animals. As a field experience, students work for a minimum of 80 hours during the semester.

VTS 2532 Large Animal Techniques**2 Hrs**

(Pre req: *Production Animals with a grade of 70% (C) or above*). Specific animal psychology of production animals is studied. The course includes nursing procedures, radiology, and surgery for production animal and equine. Safe and effective methods of controlling various kinds of livestock are discussed and practiced in a combination of lecture and hands-on laboratory format. Equine, bovine, ovine, caprine, porcine and poultry as well as other species may be covered.

VTS 2551 Large Animal Clinical Rotation**1 Hr**

(Pre req: *grade of "C" or better in Large Animal Techniques*) Students will have several extended days (32+ total hours) of experiential learning opportunities with various large animal clinics/operations in the area, where they will assist in physical exams, vaccinations, pregnancy checks, necropsies, surgeries, and other large animal procedures (as available)

VTS 2552 Facility Management II**2 Hrs**

Students study and assist with the daily work flow and management of animal facilities utilizing accepted animal welfare practices and standard operating procedures. Front office skill may be practiced and students have the opportunity to provide daily and special care for a selection of animals involved in the veterinary technology program. The course may include some weekend care of animals and facilities. The class is tailored to the student's interest and the division's needs. This class is offered as needed by students and must be prearranged with the division and class sponsor.

VTS 2563 Fur and Feather**3 Hrs**

This course is an introduction to the care of the smaller furred, feathered, and scaled animals that veterinary technicians may encounter in clinical practice. Species identification, housing requirements, dietary needs, reproduction, and potential health problems will be discussed. Emphasis will be placed on birds, rodents, small mammals, and reptiles housed at NCTA. This class includes a lecture and lab component.

VTS 2583 Nursing I**3 Hrs**

(Pre req: *Animal Care*) Basic animal nursing skills that are vital to the veterinary technician career are introduced. A large variety of skills are studied and practiced. This class includes a lecture and lab component. This class is pre req for Nursing II.

VTS 2593 Nursing II**3 Hrs**

(Pre req: *Facility Mgt. and Nursing I*) This course is a continuation of Nursing I. Advanced animal nursing skills are studied and practiced. This class includes a lecture and laboratory component. This class is a pre req for Surgery Prep.

VTS 2652 Parasitology**2 Hrs**

(Pre req: *Intro to Laboratory Science with at least a 70%*) Students study of parasitic life cycles and parasite identification methods for both internal and external parasites of domestic animals, lab animals and birds. This class includes the collection and preparation of samples and diagnostic tests commonly used by veterinary technicians in the field and those available through commercial laboratory analysis. A survey of current therapy and products available for use will be included in this course.

VTS 2672 Hematology**2 Hrs**

(Pre req: *Intro to Laboratory Science and Parasitology with at least 70%*) Student will learn skills pertaining to the study of blood. Included in the class will be: principles of laboratory safety, proper operation and maintenance of clinical laboratory equipment (microscope, centrifuge, hemacytometer, refractometer, and hemoglobinometer) and preparation of microscopic slides (collection of samples, staining techniques, identification of blood elements, reporting of results, and identification of blood parasites). Correct techniques for performing total blood counts,

hematocrits, differentials, reticulocyte counts, coagulation tests and hemoglobin determinations will also be included in this course.

VTS 2682 Clinical Pathology 2 Hrs

(Pre req: Intro to Laboratory Science, Parasitology and Hematology with at least a 70%) This course is a continuation of laboratory clinical Sciences. Students will continue laboratory testing in the areas of hematology (including blood chemistries); parasitology (including skin scraping analysis); bacteriological culturing, isolation and identification; urinalysis, cytology and sample submission.

VTS 2733 Diseases of Veterinary Medicine 3 Hrs

(Pre req: Anatomy and Physiology and Intro to Microbiology) Students study the causes of animal diseases and the principles of preventive veterinary medicine pertaining to livestock, dogs, cats and laboratory animals. Study includes investigation of specific diseases and disease control measures including biosecurity as well as parasite management in animals. Important zoonoses are covered as well. The necropsy lab provides students the opportunity to learn proper necropsy technique, sample collection and submission for diagnostic tests and appropriate disposal procedures.

VTE 2743 Veterinary Technology Overview 3 Hrs

This course is designed to provide a comprehensive review of the field of veterinary technology. It is intended for students that have completed the veterinary technology program and need to review specific areas before entering the work force or sitting for the national veterinary technician exam.

VTS 2823 Radiology II 3 Hrs

(Pre req: C (70%) or higher grade in Radiology I) This course is a continuation of Radiology I with emphasis placed on principles governing x-ray generation, establishment of technique charts, automatic film development, computerized imaging, exotic, equine, canine and feline radiographs and small animal contrast studies.

VTS 2933 Anesthesiology 3 Hrs

(Pre-requisites: Facility Mgt, Nursing I, Pharmacology and Clinical Pathology I) Principles of small animal inhalation anesthesia, pre-anesthetics, induction and maintenance anesthesia are covered in this class. Pre-surgical patient evaluations, risk classifications, monitoring techniques, equipment, inhalation machines, systems and safety are all studied in both a lecture and lab format. This class is a pre-requisite for Surgery Prep.

VTS 2953 Surgery Preparation 3 Hrs

(Pre req: Anesthesia, Nursing II, Radiology I, and Clinical Pathology II) The student is introduced to the proper preparation of the surgical theater, instruments, equipment and the animal for aseptic surgery. Students perform all the supporting operating room tasks including pre-surgical screening, anesthesia, patient preparation, surgical assisting, suite set-up, pack preparation and recovery. Correct pre-and post-operative care of the patient is stressed. This class includes a lecture and lab component.

NCTA HONORS PROGRAM

OBJECTIVES

- + To provide an enhanced and challenging learning opportunity for students of high quality.
- + To provide further recognition for students with outstanding academic or leadership skills.

HONORS PROGRAM ELIGIBILITY REQUIREMENTS

- + Completion of 30 credit hours (2 semesters) with a cumulative GPA above 3.5 at NCTA
- + Completion of 30 credit hours (2 semesters) with a cumulative GPA above 3.0 at NCTA and nominated by an NCTA faculty member.

PROGRAM OVERVIEW

Eligible students will participate in the Honors Program during their 2nd year at NCTA. The program will consist of a 2 course sequence (each 1 credit hour), one course each semester of their 2nd year.

**Fall Semester –
HON 1001 Honors Seminar I**

**Spring Semester –
HON 2001 Honors Seminar II**

These courses will focus primarily on developing the student's leadership and critical thinking skills. Course content will include guest speakers, round-table discussions, and various learning activities. Possible topics would include:

- + Networking
- + Enhanced people skills
- + Dealing with media and promotion of agriculture
- + Adding value to your product or business
- + Making a difference in your community, state, nation, world

- + Science and the Scientific Method
- + Food, society, and environmental issues: local to global scale

A key part of the overall program will be the **Honors Project**. The project will be planned and developed during the first course in the fall and then completed by the end of the second course in the spring. A final presentation of project results will be given to faculty and students. The project must fall into one of two categories:

- 1) **Research project.** Conducting an experiment in the student's area of interest. Ideally this project will be developed under co-advisors from NCTA and WCREC.
 - Example: compare the amount of spray drift from different nozzles using the wind-tunnel facility at WCREC.
- 2) **Creative activity.** The creative activity will be a project or event that is designed to promote the student's primary area of interest.
 - Example: create a Youtube video to promote agriculture such as the "I'm Farming and I Grow It" one by the Peterson brothers.

NCTA ADMINISTRATION AND FACULTY ACADEMIC CREDENTIALS

RON ROSATI, *Dean*

A.A.S., Farmingdale Agricultural & Technical
College 1978
B.S., Cornell University 1980
MAT, Cornell University 1981
Ph.D., Iowa State University, 1984

JENNIFER McCONVILLE, *Associate Dean*

A.A., Mid-Plains Community College 1998
B.S., Bellevue University 2006
M.B.A., University of Nebraska-Kearney 2011

TERRI JO BEK, *Professor*

A.A.S., Colby Community College 1974
B.S., Kearney State College 1989
M.S., University of Nebraska-Kearney 1993

BARBARA BERG, *Assistant Professor*

A.A.S., University of Nebraska School of Technical
Agriculture 1973
B.S., University of Nebraska-Kearney 2000

JUDY BOWMASTER-COLE, *Assistant Professor*

A.A.S., Nebraska College of Technical Agriculture
1992
B.S., Bellevue University 1999

TRENTEE BUSH, *Associate Professor*

B.S., University of Nebraska-Lincoln 2008
M.S., University of Nebraska-Lincoln 2010

JOANNA HERGENREDER, *Assistant Professor*

A.A.S., Laramie County Community College 2004
A.S., Laramie County Community College 2005
B.S., University of Wyoming 2008
M.S., Colorado State University 2011

GLENN JACKSON, D.V.M. *Assistant Professor*

B.S., Brigham Young University 2002
D.V.M., University of California-Davis 2006
Ph.D., University of Missouri-Columbia 2012

BRAD RAMSDALE, *Associate Professor*

B.S., Kansas State University 1992
M.S., Kansas State University 1995
Ph.D., North Dakota State University 2000

ERIC REED, *Associate Professor*

B.A., University of Nebraska at Kearney 2002
M.A., University of Nebraska at Kearney 2003
M.A., University of Nebraska at Kearney 2006
M.S., University of Nebraska at Omaha 2015

MARY RITTENHOUSE, *Assistant Professor*

B.S., University of Nebraska-Kearney 1994
M.B.A., University of Nebraska-Kearney 1997

JEREMY SIEVERS, *Assistant Professor*

B.S., Wayne State College 1999
M.S.E., Wayne State College 2001
M.B.A., Eastern Illinois University 2005

DOUGLAS SMITH, *Assistant Professor*

B.S., Sam Houston University 1998
M.S., Sam Houston University 2003
Ph.D., Texas A & M 2008

DAN STEHLIK, *Lecturer*

A.A.S., University of Nebraska School of Technical
Agriculture 1975
B.S., University of Nebraska-Lincoln 1986

RICKY SUE BARNES WACH, D.V.M., *Professor*

B.A., University of California-San Diego 1973
D.V.M., Colorado State University 1977

