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# NEBRASKA COLLEGE OF TECHNICAL AGRICULTURE

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Welcome to the 2017-2018 Course Catalog for the Nebraska College of Technical Agriculture.

NCTA is an outstanding college, known for its small classes, friendly faculty and highly successful students. The college is highly focused on its mission – preparing students for successful careers in agriculture and veterinary technology. The quality of NCTA's academic programs has been recognized by national organizations which have ranked NCTA among the best two-year colleges in the country.

We work hard to provide students with the maximum opportunity to be successful in a college program. NCTA is open admissions and low cost. A generous scholarship and financial aid package, and low tuition rate for all, attracts students from Nebraska and elsewhere. You will find some new classes and programs in this year's catalog, along with some new opportunities broaden your collegiate experience.

Our faculty focus on tangible learning activities and hands-on education relevant to modern agricultural careers. NCTA is regionally accredited by the Higher Learning Commission and federally authorized for international students. The applied technical skills students learn in classroom activities are immediately useful in their careers.

We prepare 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 Curtis community is highly supportive of NCTA students and college activities. We treat students, faculty, staff and all members of our college community with respect and kindness.

Before students even arrive at NCTA for their new semester, our faculty and staff work diligently to help them achieve success. We provide opportunity academically, financially and socially. NCTA provides a culture embracing diversity, critical analysis, leadership development, and fulfilling academic enhancement activities.

We strive to keep tuition low and higher education more affordable. An analysis of three years of financial aid records shows that more than 90% of NCTA students have received financial aid. On average, Nebraska residents with 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, students find the average financial aid award provides more than \$700 to pay for rent, food, transportation, books and other college expenses.

NCTA intercollegiate athletics focus on sports associated with agriculture and the rural lifestyle. Aggie students can join student clubs, participate in exciting programs, or compete with peers on traveling teams. You can be a team member of rodeo, ranch horse, livestock judging, shooting sports, crops judging, or the stock dog club. NCTA Aggies often achieve success when competing nationally. Our crops judging team has won national titles, we've cheered on a nationally-ranked barrel racer from Aggie Rodeo, and our livestock and agribusiness academic teams repeatedly have earned national placings.

Student clubs, teams and organizations provide students with opportunities for developing leadership skills, technical career skills, industry contacts and a career network. You will find more than 20 clubs, organizations and intramural sports at NCTA, including Agribusiness

Club, Collegiate Farm Bureau, Student Technicians of Veterinary Medicine and Women in Ag.

NCTA also has an extensive intramural sports program and a campus wellness-fitness center for your daily physical fitness workout.

The college has a broad array of academic programs in agriculture and veterinary technology. New this fall, students can enroll in our dairy production option of Agricultural Production Systems. In this new partnership with South Dakota State University students have three semesters of coursework here at NCTA with one semester of hands-on dairy work at Brookings.

The agricultural equipment program has expanded with welding courses which can prepare students for testing and certification through the American Welding Society. Our partnership with Reinke Irrigation is a mainstay in training irrigation technicians through a 1-year course. These newer courses, including equine management, bolster our traditional outstanding strengths in veterinary technology, animal science, plant science, and agribusiness.

At NCTA, faculty staff and students celebrate agriculture and a rural lifestyle. 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 just north of us, easily accessible for classroom activities. We have an extensive array of animals for class activities including cattle, horses and sheep in livestock management, or dogs, birds, snakes, rodents, and other exotics in veterinary technology.

Graduates may enroll in a University of Nebraska-Lincoln Bachelor of Applied Science program here at Curtis. While working on their bachelor's degrees students have full access to NCTA services including living at a residence hall, college advising and financial aid assistance, library and computer access, and campus athletics. The BAS program is offered through UNL's College of Agricultural Sciences and Natural Resources.

This is a great time for our students to be entering the field of agriculture. With an increasing demand placed on our agricultural industries to provide even more food for a growing world, we play a leading role in educating future producers and industry leaders. Students graduating from NCTA are prepared and eager to be engaged in the future workforce.

Let me know how I may assist you in pursuing your career path here at NCTA.

Ron Rosati, Dean

# ACADEMIC CALENDAR

Calendar is subject to change

## AUGUST 2017

18	Residence Halls open for fall semester at 8 am
18-20	Freshman Orientation
21	Late Registration Begins (\$25 late registration fee assessed)
21	First Semester Classes Begin
28	Last day to drop a full semester course and receive a 100% refund

## SEPTEMBER

1	Last day to drop a full semester course and receive a 75% refund
1	Last day to file a drop to remove course from student's record
1	All course withdrawals noted with a grade of "W" on academic record (through 11/27)
4	LABOR DAY (Student and Staff Holiday - NCTA Offices Closed)
8	Last day to drop a full semester course and receive a 50% refund
12	Last day to submit tuition and fees payment without penalty
15	Last day to drop a full semester course and receive a 25% refund - No refund after this date
28	Last day to DROP first 8-week course

## OCTOBER

1	December Degree Applications Due
13	FIRST 8-WEEK FINAL EXAMS
13	First 8-Week Session Ends
16-17	FALL BREAK (Student Holiday - NCTA Offices Open)
18	Second 8-Week Session Begins

## NOVEMBER

10	Registration Begins for Spring Semester 2017
22	Residence Halls close for Thanksgiving at 10am
22	STUDENT HOLIDAY (NCTA Offices Open)
23-24	THANKSGIVING VACATION (NCTA Offices Closed)
26	Residence Halls reopen at 10am
27	Last day to DROP second 8-week and 16-week courses

## DECEMBER

11-14	FIRST SEMESTER FINAL EXAMS
14	END OF FALL SEMESTER (Student Holiday Break Begins)

16	Residence Halls close for winter break at 10am
25-1/2	HOLIDAY CLOSDOWN (NCTA Offices Closed)

## JANUARY 2018

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

## FEBRUARY

2	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)
16	Last day to DROP first 8-week course

## MARCH

2	FIRST 8-WEEK FINAL EXAMS
2	First 8-Week Session Ends
5	Second 8-Week Session Begins
7	Registration begins for Summer Session 2017
16	Residence Halls close for Spring Break at 5 pm
19-23	SPRING BREAK (STUDENT HOLIDAY – NCTA Offices Open)
25	Residence Halls Reopen at 10 am

## APRIL

10	Registration Begins for Fall Semester 2017
13	Last day to DROP second 8-week and 16-week courses
26-30	SECOND SEMESTER FINALS

## MAY

1	SECOND SEMESTER FINALS
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3	End of Spring Semester
3	GRADUATION!!
4	Residence Halls Closed for summer at 10 am
28	MEMORIAL DAY (NCTA Offices Closed)
<b>JUNE</b>	
11	Summer Session Begins
14	Last day to drop a summer session course and receive a 100% refund
15	Last day to drop a summer session course and receive a 75% refund
22	Last day to drop a summer session course and receive a 50% refund
29	Last day to drop a summer session course and receive a 25% refund- No refund after this date
<b>JULY</b>	
1	August Degree Applications Due
4	INDEPENDENCE DAY HOLIDAY (NCTA Offices Closed)
20	Last day to DROP an 8-Week summer session course
<b>AUGUST</b>	
3	Summer Session Ends

# 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:

- One tuition rate for all students
- 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)

## 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, along with Student Services Office, Recruitment, and Admissions. Other buildings on campus include three 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.

## 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

## 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.

## 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 Compass 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.

## 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 2017-18 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 4.

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.

## 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)

## 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:**

NCTA is dedicated to the prevention of sexual discrimination, sexual harassment and sexual misconduct, and providing a safe campus for its employees and students. If you have any concerns contact:

Jennifer McConville, Title IX Coordinator and Associate Dean for Finance, Operations and Student Services; 404 E. 7th; Curtis, NE; (308) 367-5259; jmccconville2@unl.edu

### **Disability or Discrimination Inquiries:**

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

**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 come to the north side of the Agricultural Education Center. 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 favors, 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

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

### **NCTA Bullying Policy**

The Nebraska College of Technical Agriculture is a community which encourages the intellectual and emotional growth of its members. We respect the contributions, perspectives and personal worth of all students, staff and faculty. In our interactions with each other, we demonstrate respect and support. As a result, behaviors perceived as bullying or harassment are not tolerated at NCTA.

*Bullying or harassing behavior* is defined as any pattern of gestures or written, electronic or verbal communications, or any physical act or any threatening communication, or any act reasonably perceived as being motivated by any actual or perceived differentiating characteristic, that takes place on any property owned or controlled by Nebraska College of Technical Agriculture, or during any activity in whatever place sponsored by, directed or controlled by Nebraska College of Technical Agriculture, and that also fulfills one of the following conditions:

- Places a student, faculty or staff member in actual and reasonable fear of harm to his or her person or damage to his or her property
- Creates or is certain to create a hostile environment by substantially interfering with or impairing a student's educational performance, opportunities or benefits

*A hostile environment* is defined as the condition wherein the victim subjectively views the conduct as bullying or harassing behavior and the conduct is objectively severe or pervasive enough that a reasonable person would agree it is bullying or harassing behavior.

It is the policy of NCTA that no student, faculty or staff member will be subjected to bullying or harassing behavior by any other student, faculty or staff member. Furthermore, no person should engage in any act of reprisal or retaliation against a victim, witness or anyone with information about an act of bullying or harassing behavior.

Any witness to bullying on campus is asked to report the instance to a suitable party. A *suitable party* is defined as a person with responsibility to prevent bullying or harassing behavior within or during a particular activity, class, building or function. In the case of a student being subjected to bullying or harassing behavior, a suitable party might be an instructor, residence hall staff or a counselor. In the case of a faculty or staff member being subjected to bullying or harassing behavior, a suitable party might be a dean, academic chair or a superior. It is the responsibility of the suitable party to follow up when receiving a report of bullying or harassing behavior.

Procedures for investigating reports of bullying or harassing behavior which involve students may be found in section R-20 in the Student Handbook. Procedures for investigating reports of bullying or harassing behavior involving employees may be found in college policy, board policy or other pertinent documents. The Dean's Office or the Human Resources office can provide assistance to employees wishing to initiate investigations of bullying or harassing actions against college employees.

### **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 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/SAT, Accuplacer (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 official 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 and pay the \$45.00 nonrefundable application fee.
2. Applicants must request that all FINAL official high school and/or college transcripts be sent to the Student Services Office.

Mail to:

**Nebraska College of Technical Agriculture**

Office of Student Services

404 East 7th Street

Curtis, NE 69025-9502

3. All students who attend the Nebraska College of Technical Agriculture are required to take the Asset, Accuplacer (Compass), ACT or SAT assessment test. Test scores are used for scholarships, advising, and guidance 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

<http://ncta.unl.edu/admissions-process-0>

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 (Via postal service) all official documents to:

**NCTA Office of International Admissions**

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:

- A certified copy of your passport, or government issued photo ID.
- Bank Letter, stamped and signed by a bank official, and specifies the date, monetary currency, and name of the account holder.
- 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.unl.edu/apply-global-students>.

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

You may schedule a tour online at <http://ncta.unl.edu/ncta-campus-tours>. 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. Tours during the summer months may vary. For more information contact Linda Cole, 308-367-5240 or [icole1@unl.edu](mailto:icole1@unl.edu).

# 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.

## 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 (<https://myncta.nebraska.edu>) 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.

### 2017-2018 Tuition

Nebraska Resident per credit hour	\$121.00
Non-Resident per credit hour	\$121.00
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 through the Office of Financial Aid at 308-367-5207 or by emailing [nctafinancialaid@unl.edu](mailto:nctafinancialaid@unl.edu).

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
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.

## 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](http://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 October 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).

After applying, regularly check your MyNCTA.nebraska.edu (<https://myncta.nebraska.edu>) account for awards and requests of additional documents. 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.

## 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%
New 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	

## 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 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.

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.

## 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 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 and SAT and have the scores sent to NCTA.

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

# 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 (<https://myncata.nebraska.edu>) prior to and during the first week of any semester or session. Classes can not be added after the first week of each semester.

## 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 nonrefundable 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

At the end of the fall and spring semester, students who have shown outstanding academic achievement are placed on the Dean's List or Dean's Honor Roll based on the following criteria:

**Dean's List:** (a student must meet all of the following criteria)

- Earn a semester GPA of 4.00
- Complete a minimum of 12 credit hours, 9 of which must be letter graded (A), (NO P/F)
- Have no final grade of an I (incomplete)

**Dean's Honor Roll:** (a student must meet all of the following criteria)

- Earn a minimum semester GPA of 3.50
- Complete a minimum of 12 credit hours, 9 of which must be letter graded (A, B, C). (NO P/F)
- Have no final grades of D, F, or I (incomplete)

## Dropping a Class

During the 8-week modular semesters and/or 16-week semester, a student may drop a course on MyNCTA (<https://myncta.nebraska.edu>) 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 (<https://myncta.nebraska.edu>) 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.

3/4 Time (credit hours)	9	4.5
1/2 Time (credit hours)	6	3

## 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.

## 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

<b>Weeks/Session</b>	<b>16</b>	<b>8</b>
Full Time (credit hours)	12	6

## 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 (<https://myncta.nebraska.edu>).

# STUDENT ACTIVITIES AND ORGANIZATIONS

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## Ag Business Club

Membership in the Ag 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, this 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 Ag Business Club promotes enhanced communications among students interested in agriculture business.

## 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.

## Aggie trap club

This club offers a variety of trap shooting programs, encompassing leisure recreation and competitive shooting including leagues and/or collegiate competition while providing a social network for knowledge and training in the shooting sports.

## 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. 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.

## CRU

The purpose of this organization is to build movements of people who are transformed by Jesus Christ. This student led movement seeks to introduce students to Jesus Christ, help them grow in their faith, encourage them to live a life passionately under the lordship of Christ, and inspire commitment to advancing the purpose of God in the world.

## 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

Any student enrolled at NCTA is welcome to join the Horticulture Club. Activities include 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.

## stock dog club

The purpose of this organization is to foster, promote and develop the use of stock dogs for the benefit of farmers, ranchers, students and other livestock owners and stock dog handlers. To introduce students to stock dog competitions, education in the daily care and conditioning of a stock dog and to sponsor sanctioned trials, educational events and demonstrations.

## 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.

# CURRICULUM

- Agribusiness Management Systems (p. 23)
- APS Agronomy and Agricultural Mechanics (p. 28)
- APS Animal Science/AG Education (p. 25)
- General Education (p. 22)
- Veterinary Technology Systems (p. 31)

## 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 Science Curriculum

General Education Courses

### Written Communication & Critical Thinking

ENG 1903 COLLEGE COMP 3

ENG 2203 ADV COMPOSITION 3

Credit Hours Subtotal: 6

### Oral Communication

Select one of the following: 3-5

SPA 1115

SPC 1113 SPEECH

Credit Hours Subtotal: 3-5

### Quantitative Literacy

Select one of the following: 3

MTH 1503 COLLEGE ALGEBRA

MTH 2203 ELEM OF STATISTICS

MTH 2253

Credit Hours Subtotal: 3

### Problem Solving

Computers

AIT 1003 SOFTWARE PRODUCTIVITY 3

Life Sciences

Select one of the following: 4

ASI 1024 FUND OF ANIMAL BIO

BIO 1104 GENERAL BIOLOGY

BIO 1313 PLANT SCIENCE

BIO 1321 AGRONOMIC PLANT SCIENCE  
LABORATORY

BIO 1331 INTRODUCTION TO HORTICULTURAL  
SCIENCE LABORATORY

Physical Sciences

Select one of the following: 4

CHM 1014 INTRODUCTION TO CHEMISTRY I

CHM 1024 INTRODUCTION TO CHEMISTRY II

CHM 1104 GENERAL CHEM I

Information Literacy & Intercultural Knowledge and  
Competence 1

PSY 1011 LEARNING COMMUNITIES

Civic Engagement 3

AED 1023 INTERPERSONAL SKILLS FOR  
LEADERSHIP

or PSY 1103 HUMAN RELATIONS

Credit Hours Subtotal: 15

Total Credit Hours 27-29

## Associate of Applied Science Curriculum

General Education Courses

### Written Communication & Critical Thinking

Select one of the following 3

ENG 1903 COLLEGE COMP

ENG 2203 ADV COMPOSITION

Credit Hours Subtotal: 3

### Oral Communication

Select one of the following: 3-5

SPA 1115

SPC 1113 SPEECH

or SPC 1103 SALES COMM

Credit Hours Subtotal: 3-5

### Quantitative Literacy

Select one of the following: 3

MTH 1503 COLLEGE ALGEBRA

MTH 2203 ELEM OF STATISTICS

MTH 2253

MTH 1203 INTERMEDIATE ALGEBRA

MTH 1403 Agricultural Mathematics

VTS 1313 MATH FOR VET TECHS

Credit Hours Subtotal: 3

### Problem Solving

Computers

AIT 1003 SOFTWARE PRODUCTIVITY 3

Life Sciences

Select one of the following: 4

ASI 1024 FUND OF ANIMAL BIO

BIO 1104	GENERAL BIOLOGY	
BIO 1313	PLANT SCIENCE	
BIO 1321	AGRONOMIC PLANT SCIENCE LABORATORY	
BIO 1331	INTRODUCTION TO HORTICULTURAL SCIENCE LABORATORY	
<b>Physical Sciences</b>		
CHM 1014	INTRODUCTION TO CHEMISTRY I	
CHM 1024	INTRODUCTION TO CHEMISTRY II	
CHM 1104	GENERAL CHEM I	
Credit Hours Subtotal:		7
<b>Information Literacy &amp; Intercultural Knowledge and Competence</b>		
PSY 1011	LEARNING COMMUNITIES	1
Credit Hours Subtotal:		1
<b>Civic Engagement &amp; Information Literacy</b>		
AED 1023	INTERPERSONAL SKILLS FOR LEADERSHIP	3
	or PSY 1103 HUMAN RELATIONS	
Credit Hours Subtotal:		3
Total Credit Hours		20-22

## Associate of Applied Science Degree (A.A.S.) and associate of science (A.S.)

### 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

- 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.
- 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.
- 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).
- 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.
- 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.

- 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.
- 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.
- Intercultural Knowledge and Competence:** Intercultural Knowledge and Competence is “a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts.” (Bennett, J. M. 2008. Transformative training: Designing programs for culture learning. In *Contemporary leadership and intercultural competence: Understanding and utilizing cultural diversity to build successful organizations*, ed. M. A. Moodian, 95-110. Thousand Oaks, CA: Sage.)

## 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, Associate Professor

### Faculty

Jeremy Sievers, Associate Professor

### Career Opportunities

Agribusiness Management graduates are pursuing careers in agricultural management, marketing and finance in relevant industries.

### INTERNSHIP

Connecting the classroom to the student's career, internships are required for the Agribusiness Management Systems Program. The internship will be a four (4) credit hour course and includes an eight (8) week, 320 hours, on-site training in an area of Agribusiness management of interest to the student.

### CAPSTONE

ABM 2903 ENTREPRENEURSHIP serves as the AMS capstone course. Taken during the final semester, students will be required to complete a project and presentation that assesses interdisciplinary skills (qualitative and quantitative, hard and soft) and allows students an opportunity to demonstrate the knowledge and skills gained in their college courses.

## 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	3
or MTH 1503	COLLEGE ALGEBRA	
ABM 2003	CRITICAL THINKING	3
ABM 2004	INTERNSHIP	4
ABM 2911	SEMINAR	1
ACT 1103	ACCOUNTING I	3
ECN 1203	MICROECONOMICS	3
or ECN 1103	INTRODUCTION TO AG ECONOMICS	
MGT 2103	MGT CONCEPTS	3
Total Credit Hours		20

## Majors

### Agribusiness Management Systems with Management Option, AAS

#### Associate of Applied Science Core

Complete requirements	20-22
Credit Hours Subtotal:	20-22

#### Agribusiness Management Systems Core

Complete requirements	20
Credit Hours Subtotal:	20

#### Management Option Courses

ABM 2403	AG FINANCE	3
ABM 2503	AGRICULTURAL DECISION ANALYSIS	3
ABM 2854	FARM & RANCH MANAGEMENT	4
ABM 2903	ENTREPRENEURSHIP	3
ACT 1203	ACCOUNTING II	3
AIT 1073	INTRODUCTION TO DATABASES	3
ECN 1303	MACROECONOMICS	3
MGT 2503	HUMAN RESOURCES MGT	3
MKT 2203	AG MARKETING	3

#### Electives

Select one of the following (not already taken):	3	
ABM 2103	PERSONAL FINANCE	
ABM 2963	Farm, Ranch, and Small Business Record Keeping	
AIT 1083	DESKTOP PUBLISHING & WEB DESIGN BASICS	
MKT 2103	RETAIL MARKETING	
Credit Hours Subtotal:	31	

Total Credit Hours	71-73
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### Agribusiness Management Systems with Transfer Option, AS

#### Associate of Applied Science Core

Complete requirements	27-29
Credit Hours Subtotal:	27-29

#### AMS Required Courses

ABM 1803	BUSINESS STATISTICS	3
ABM 2403	AG FINANCE	3
ABM 2903	ENTREPRENEURSHIP	3
ACT 1103	ACCOUNTING I	3
ACT 1203	ACCOUNTING II	3
ECN 1203	MICROECONOMICS	3
ECN 1303	MACROECONOMICS	3
MGT 2103	MGT CONCEPTS	3
MKT 2203	AG MARKETING	3
Credit Hours Subtotal:		27

#### Electives

Select 12 hours of the following or by advisor approval (at least six must be AMS courses):

ABM 2004	INTERNSHIP	
ABM 2854	FARM & RANCH MANAGEMENT	
AGR 1103	CROP SCIENCE	
AGR 2404		
ASI 1303	ANIMAL MANAGEMENT	
ASI 2303	RANGE MANAGEMENT	
ASI 2513	MEAT SCIENCE	
MGT 2503	HUMAN RESOURCES MGT	
MKT 2103	RETAIL MARKETING	
Credit Hours Subtotal:		12

Total Credit Hours	66-68
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## Agribusiness Management Systems, Minor

#### Required AMS Minor Courses

ABM 2103	PERSONAL FINANCE	3
ABM 2963	Farm, Ranch, and Small Business Record Keeping	3
or ACT 1103	ACCOUNTING I	
ECN 1203	MICROECONOMICS	3
MGT 2103	MGT CONCEPTS	3
Credit Hours Subtotal:		12

#### Agribusiness Management Courses

Select 12 hours of the following (nine must be 2000 level courses):

ABM 2003	CRITICAL THINKING	
ABM 2403	AG FINANCE	
ABM 2503	AGRICULTURAL DECISION ANALYSIS	
ABM 2854	FARM & RANCH MANAGEMENT	
ABM 2903	ENTREPRENEURSHIP	
ACT 1203	ACCOUNTING II	
ECN 1303	MACROECONOMICS	
ECN 1403	ECONOMICS OF WORLD FOOD AND AGRICULTURE	
MGT 2503	HUMAN RESOURCES MGT	
MKT 2103	RETAIL MARKETING	
MKT 2203	AG MARKETING	
SPC 1103	SALES COMM	



Credit Hours Subtotal:	12
Total Credit Hours	24

## Agribusiness Management Systems, Certificate

### AMS Certificate Foundation Courses

ENG 1503	BUSINESS & TECHNICAL WRITING	3
SPC 1103	SALES COMM	3
AED 1023	INTERPERSONAL SKILLS FOR LEADERSHIP	3
Credit Hours Subtotal:		9

### Additional AMS Courses

Select 21 hours of the following: 21

ABM 2003	CRITICAL THINKING	
ABM 2403	AG FINANCE	
ABM 2103	PERSONAL FINANCE	
ABM 2503	AGRICULTURAL DECISION ANALYSIS	
ABM 2854	FARM & RANCH MANAGEMENT	
ABM 2903	ENTREPRENEURSHIP	
ABM 2963	Farm, Ranch, and Small Business Record Keeping	
ACT 1103	ACCOUNTING I	
ACT 1203	ACCOUNTING II	
ECN 1203	MICROECONOMICS	
	or ECN 1203 MICROECONOMICS	
ECN 1303	MACROECONOMICS	
ECN 1403	ECONOMICS OF WORLD FOOD AND AGRICULTURE	
MGT 2503	HUMAN RESOURCES MGT	
MGT 2103	MGT CONCEPTS	
MKT 2103	RETAIL MARKETING	
MKT 2203	AG MARKETING	

Credit Hours Subtotal:	21
Total Credit Hours	30

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.

## APS Animal Science/AG Education Division Chair

Doug Smith, Ph.d., Associate 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

A to B 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

## 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	3
	or AGR 2943 FARM AND RANCH CAPSTONE	
ABM 2963	Farm, Ranch, and Small Business Record Keeping	3
	or ACT 1103 ACCOUNTING I	
ASI 2906	INTERNSHIP	6
ABM 2854	FARM & RANCH MANAGEMENT	4
ECN 1103	INTRODUCTION TO AG ECONOMICS	3

or ECN 1203	MICROECONOMICS	
Total Credit Hours		19

## options

### Equine Industry Management

#### Associate of Applied Science Core

Complete requirements	20-22
Credit Hours Subtotal:	20-22

#### Ag Production Systems Core

Complete requirements	19
Credit Hours Subtotal:	19

#### Equine Industry Core

ASI 1011	INTRO TO ANIMAL SCI	1
ASI 1253	NUTRITION	3
ASI 1263	BASIC EQUITATION	3
ASI 1303	ANIMAL MANAGEMENT	3
ASI 1432	EQUINE CARE	2
ASI 1442	EQUINE PRACTICUM I	2
ASI 1501	EQUINE SAFETY	1
ASI 2303	RANGE MANAGEMENT	3
ASI 2433	EQUINE INDUS MNGT I	3
ASI 2442	EQUINE PRACTICUM II	2
ASI 2443	EQUINE INDUS MNGT II	3
Credit Hours Subtotal:		26

#### Equine Industry Specialization Focus

Select 7 hours of the following:		7
ASI 2313	RATION FORMULATION	
ASI 2362	ADVANCED EQUITATION (P)	
ASI 2363	INTERMEDIATE TRAINING	
ASI 2463	ADVANCED PERFORMANCE TRAINING	
ASI 2384	LG AN DISEASE & PHARM (P)	
or ASI 2412	EQUINE MARKETING TECHNIQUES	
ASI 2462	COLT STARTING	
ASI 2604	LIVSTCK ANAT & PHYSO	
or ASI 2612	EQUINE REPRODUCTION	
MGT 2103	MGT CONCEPTS	
MKT 2103	RETAIL MARKETING	
VTS 1404	ANATOMY & PHYSIOLOGY	
Credit Hours Subtotal:		7

#### Advisory Guided Electives

Complete requirements	3
Credit Hours Subtotal:	3

Total Credit Hours	75-77
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### Livestock Industry Management

#### Associate of Applied Science Core

Complete requirements	20-22
Credit Hours Subtotal:	20-22

#### Ag Production Systems Core

Complete requirements	19
Credit Hours Subtotal:	19

#### Livestock Industry Management Core

ASI 1011	INTRO TO ANIMAL SCI	1
ASI 1203	FEEDLOT SYSTEMS	3
or ASI 2753	BEEF PRODUCTION SYSTEMS	
ASI 1213	LIVESTK & CARC EVAL	3
ASI 1253	NUTRITION	3
ASI 1303	ANIMAL MANAGEMENT	3
ASI 2384	LG AN DISEASE & PHARM	4
MKT 2203	AG MARKETING	3
Credit Hours Subtotal:		20
<b>Livestock Industry Specialization</b>		
Select 11 credits of the following:		11
ABM 2403	AG FINANCE	
ABM 2903	ENTREPRENEURSHIP	
ACT 1203	ACCOUNTING II	
AEQ 1153	EQUIPMENT PRINCIPLES	
AEQ 2303	EQUIP PREVENTATIVE MAINTENANCE	
AGR 2383	IRRIGATION MANAGEMENT	
ASI 1222	ADV LVSTK EVAL/JUDG	
ASI 1312	LIVESTOCK JUDGING I	
ASI 1351	ART INSEM BEEF CATTL	
ASI 1432	EQUINE CARE	
ASI 2203	FEEDS & FEEDING	
ASI 2303	RANGE MANAGEMENT	
ASI 2312	LIVESTOCK JUDGING II	
ASI 2313	RATION FORMULATION	
ASI 2353	LIVESTOCK BREEDING	
ASI 2513	MEAT SCIENCE	
ASI 2604	LIVSTCK ANAT & PHYSO	
or VTS 1404	ANATOMY & PHYSIOLOGY	
ASI 2773	ADVANCED REPRODUCTIVE PHYSIOLOGY	
MGT 2103	MGT CONCEPTS	
MGT 2503	HUMAN RESOURCES MGT	
Credit Hours Subtotal:		11
<b>Advisor Guided Electives</b>		
Complete Requirements		5
Credit Hours Subtotal:		5
Total Credit Hours		75-77

## Agriculture Education, Associate of Science Degree Transfer

#### Associate of Science Core

Complete requirements	27-29
Credit Hours Subtotal:	27-29

#### Agriculture Education Specialization Focus Courses

Select 24 hours of the following:		24
ABM 2003	CRITICAL THINKING	
ACT 1103	ACCOUNTING I	
ACT 1203	ACCOUNTING II	
AED 1103	INTRODUCTION TO SECONDARY AGRISCIENCE EDUCATION	
AED 1233	PLANNING, LEADERSHIP AND EXPERENTIAL PROGRAMS	
AEQ 1103	SMALL ENGINES	

AEQ 1203	WELDING
AGR 1201	SOILS LAB
AGR 1203	PRINCIPLES OF SOILS
AGR 2103	BUILDING CONSTRUCTION
ASI 1011	INTRO TO ANIMAL SCI
ASI 1213	LIVESTK & CARC EVAL
ASI 1303	ANIMAL MANAGEMENT
ASI 2513	MEAT SCIENCE
ECN 1203	MICROECONOMICS
ECN 1303	MACROECONOMICS
Credit Hours Subtotal:	24
<b>Electives</b>	
Advisor Guided Electives	11
Credit Hours Subtotal:	11
Total Credit Hours	62-64

### ANIMAL SCIENCE, ASSOCIATE OF SCIENCE DEGREE

<b>Associate of Science Core</b>	
Complete requirements	27-29
Credit Hours Subtotal:	27-29
<b>Animal Science Specialization Focus</b>	
Select 24 hours of the following:	24
ABM 2003	CRITICAL THINKING
ABM 2403	AG FINANCE
ACT 1103	ACCOUNTING I
ACT 1203	ACCOUNTING II
ASI 1011	INTRO TO ANIMAL SCI
ASI 1024	FUND OF ANIMAL BIO
ASI 1213	LIVESTK & CARC EVAL
ASI 1253	NUTRITION
ASI 1303	ANIMAL MANAGEMENT
ASI 2203	FEEDS & FEEDING
ASI 2384	LG AN DISEASE & PHARM
ASI 2513	MEAT SCIENCE
ASI 2604	LIVSTCK ANAT & PHYSO
ASI 2773	ADVANCED REPRODUCTIVE PHYSIOLOGY
ECN 1303	MACROECONOMICS
MGT 2103	MGT CONCEPTS
MGT 2503	HUMAN RESOURCES MGT
Credit Hours Subtotal:	24
<b>Electives</b>	
Advisor Guided Electives	11
Credit Hours Subtotal:	11
Total Credit Hours	62-64

### GRAZING LIVESTOCK, ASSOCIATE OF SCIENCE DEGREE

<b>Associate of Science Core</b>	
Complete requirements	27-29
Credit Hours Subtotal:	27-29
<b>Grazing Livestock Systems Specialization Focus</b>	
Select 24 hours of the following:	24
ABM 2003	CRITICAL THINKING

ACT 1103	ACCOUNTING I
AGR 1201	SOILS LAB
AGR 1203	PRINCIPLES OF SOILS
ASI 1303	ANIMAL MANAGEMENT
ASI 2303	RANGE MANAGEMENT
ASI 2513	MEAT SCIENCE
ASI 2604	LIVSTCK ANAT & PHYSO
ECN 1203	MICROECONOMICS
MGT 2103	MGT CONCEPTS
Credit Hours Subtotal:	24
<b>Electives</b>	
Select 11 hours of electives	11
Credit Hours Subtotal:	11
Total Credit Hours	62-64

### 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	3
or ASI 1303	ANIMAL MANAGEMENT	
Select 12 hours of Agriculture Production Stytems courses <sup>1</sup>		12
Total Credit Hours		15

<sup>1</sup> VTS 1713 PHARMACY-ANESTHESIA and VTS 2733 DISEASES OF VET MED can be used as part of the required twelve hours.

### Beef Production Emphasis, CERTIFICATE

<b>Total Required Core Courses</b>	
Complete requirements	6
Credit Hours Subtotal:	6
<b>Emphasis Area</b>	
Select 12 hours of the following:	12
ASI 1011	INTRO TO ANIMAL SCI
ASI 1213	LIVESTK & CARC EVAL
ASI 1253	NUTRITION
ASI 1303	ANIMAL MANAGEMENT
ASI 2203	FEEDS & FEEDING
ASI 2303	RANGE MANAGEMENT
ASI 2353	LIVESTOCK BREEDING
ASI 2384	LG AN DISEASE & PHARM
Credit Hours Subtotal:	12
<b>Electives</b>	
Select 12 hours of electives	12
Credit Hours Subtotal:	12
Total Credit Hours	30

### EQUINE TRAINING MANAGEMENT, CERTIFICATE

<b>Required Courses</b>		
ASI 1263	BASIC EQUITATION	3
ASI 1432	EQUINE CARE	2

ASI 1501	EQUINE SAFETY	1
ASI 1442	EQUINE PRACTICUM I	2
ASI 2442	EQUINE PRACTICUM II	2
ASI 2462	COLT STARTING	2
ASI 2363	INTERMEDIATE TRAINING	3
ASI 2463	ADVANCED PERFORMANCE TRAINING	3
ASI 2412	EQUINE MARKETING TECHNIQUES	2
Credit Hours Subtotal:		20

## 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.

## 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.

## 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 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.

# APS Agronomy and Agricultural Mechanics

## Division Chair

Brad Ramsdale, Ph.D., Associate Professor

## Faculty

**Tee Bush**, Associate Professor

**John Porter**, Assistant 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.

## 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.

## 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
ECN 1103	INTRODUCTION TO AG ECONOMICS	3
ABM 2963	Farm, Ranch, and Small Business Record Keeping	3
or ACT 1103	ACCOUNTING I	
ABM 2854	FARM & RANCH MANAGEMENT	3-4
or MGT 2103	MGT CONCEPTS	
ABM 2903	ENTREPRENEURSHIP	3
or AGR 2943	FARM AND RANCH CAPSTONE	
Total Credit Hours		15-16

## Agricultural Equipment Management Option

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

### Associate of Applied Science Core

Complete requirements	20-22
Credit Hours Subtotal:	22

<b>Agronomy-Ag Mechanics Core</b>	
Complete requirements	15-16
Credit Hours Subtotal:	16
<b>Equipment Management Courses</b>	
Select 20 credits of the following:	20
AEQ 1103 SMALL ENGINES	
AEQ 1153 EQUIPMENT PRINCIPLES	
AEQ 1203 WELDING	
AEQ 1313 INTERMEDIATE WELDING	
AEQ 1503 DC CIRCUIT ANALYSIS	
AEQ 1513 AC CIRCUIT ANALYSIS	
AEQ 2211 HYDRAULICS	
AEQ 2214 ADVANCED WELDING	
AEQ 2303 EQUIP PREVENTATIVE MAINTENANCE	
AEQ 2404 MECHANIZED IRRIGATION SYSTEMS	
AEQ 2413 DIESEL ENGINE	
Credit Hours Subtotal:	20
<b>Electives</b>	
Advisor Guided Electives	12-15
Credit Hours Subtotal:	12
Total Credit Hours	70

## Agronomy Industry Management Option

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

<b>Associate of Applied Science Core</b>	
Complete requirements	20-22
Credit Hours Subtotal:	20
<b>Agronomy-Ag Mechanics Core</b>	
Complete requirements	15-16
Credit Hours Subtotal:	16
<b>Agronomy Option Core</b>	
Complete requirements	24
See below:	
AGR 1091 CROP PRACTICUM I	
AGR 1201 SOILS LAB	
AGR 1203 PRINCIPLES OF SOILS	
MKT 2203 AG MARKETING	
AGR 1591 CROP PRACTICUM II	
AGR 2091 CROP PRACTICUM III	
AGR 2304 SOIL FERTILITY	
AGR 2353 PEST MANAGEMENT	
AGR 2383 IRRIGATION MANAGEMENT	
AGR 2404	
Credit Hours Subtotal:	24
<b>Agronomy Specialization</b>	
Select 6 credits of the following:	6
AEQ 1153 EQUIPMENT PRINCIPLES	
AEQ 1203 WELDING	
AEQ 2303 EQUIP PREVENTATIVE MAINTENANCE	
AEQ 2323 PRECISION FARM TECH	

AEQ 2413 DIESEL ENGINE	
AGR 1213 NATURAL RES MNGT	
AGR 1891 CROPS JUDGING I	
AGR 2892 CROPS JUDGING II	
Credit Hours Subtotal:	6
<b>Electives</b>	
Advisor Guided Electives	2-5
Credit Hours Subtotal:	4
Total Credit Hours	70

## Diversified Agriculture Management Option

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

<b>Associate of Applied Science Core</b>	
Complete requirements	20-22
Credit Hours Subtotal:	20
<b>Agronomy-Ag Mechanics Core</b>	
Complete requirements	15-16
Credit Hours Subtotal:	16
<b>Diversified Agriculture Core</b>	
See below:	7
AGR 1203 PRINCIPLES OF SOILS	
AGR 1201 SOILS LAB	
ASI 1303 ANIMAL MANAGEMENT	
Credit Hours Subtotal:	7
<b>Diversified Agriculture Specialization</b>	
Select two of the following:	6-8
AEQ 2323 PRECISION FARM TECH	
AGR 2304 SOIL FERTILITY	
AGR 2383 IRRIGATION MANAGEMENT	
AGR 2353 PEST MANAGEMENT	
AGR 2404	
Select two of the following:	6
ASI 1203 FEEDLOT SYSTEMS	
ASI 1213 LIVESTK & CARC EVAL	
ASI 1253 NUTRITION	
ASI 2353 LIVESTOCK BREEDING	
ASI 2753 BEEF PRODUCTION SYSTEMS	
Credit Hours Subtotal:	12
<b>Electives</b>	
Advisor Guided Electives	11-16
Credit Hours Subtotal:	15
Total Credit Hours	70

## 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

Complete requirements	27-29
Credit Hours Subtotal:	27

### Agronomy Specialization

Select 24 credits of the following:	24
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ABM 2854	FARM & RANCH MANAGEMENT
ACT 1103	ACCOUNTING I
AGR 1201	SOILS LAB
AGR 1203	PRINCIPLES OF SOILS
AGR 2304	SOIL FERTILITY
AGR 2404	
ASI 2303	RANGE MANAGEMENT
ECN 1203	MICROECONOMICS
ECN 1303	MACROECONOMICS
MKT 2203	AG MARKETING

Credit Hours Subtotal:	24
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### Electives

Advisor Guided Electives	11-13
Credit Hours Subtotal:	13

Total Credit Hours	64
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## Horticulture Option

### Associate of Science Core

Complete requirements	26-28
Credit Hours Subtotal:	26

### Horticulture Specialization

Select 24 credits of the following:	24
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ACT 1103	ACCOUNTING I
AGR 1201	SOILS LAB
AGR 1203	PRINCIPLES OF SOILS
AGR 2304	SOIL FERTILITY
ECN 1203	MICROECONOMICS
HSL 1053	LANDSCAPE APPRECIATION
HSL 1073	LANDSCAPE PLANTS I
HSL 1103	PLANT PROPAGATION
HSL 1173	LANDSCAPE PLANTS II
HSL 2283	LANDSCAPE MANAGEMENT
HST 1113	

Credit Hours Subtotal:	24
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### Electives

Advisor Guided Electives	11-13
Credit Hours Subtotal:	14

Total Credit Hours	64
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## 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 2103	AG CHEM APPLICATOR,AG CHEMICAL APPLICATION	3
AEQ 2323	PRECISION FARM TECH	3
AGR 2353	PEST MANAGEMENT	3
AGR 2201	COMMERICAL AG CARRIER	1
Advisor Guided Electives (AGR or AEQ)		6
Total Credit Hours		16

## 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, Certificate

AEQ 1172		2
AEQ 1501	INTRODUCTION TO ELECTRIC CODE	1
AEQ 1503	DC CIRCUIT ANALYSIS	3
AEQ 1513	AC CIRCUIT ANALYSIS	3
AEQ 2404	MECHANIZED IRRIGATION SYSTEMS	4
SPC 1103	SALES COMM	3
Total Credit Hours		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		2
AEQ 1203	WELDING	3
AEQ 1313	INTERMEDIATE WELDING	3
AEQ 2214	ADVANCED WELDING	4
AEQ 2604	WELDING APPRENTICESHIP	4
Total Credit Hours		16

## Crop Production, Certificate

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

### Required General Education Credits

Complete requirements	6
Credit Hours Subtotal:	6

### Crop Production Emphasis

Select 18 credits of the following:	18
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AEQ 1153	EQUIPMENT PRINCIPLES
AEQ 1203	WELDING
AEQ 2303	EQUIP PREVENTATIVE MAINTENANCE

AEQ 2323	PRECISION FARM TECH	
AGR 1201	SOILS LAB	
AGR 1203	PRINCIPLES OF SOILS	
AGR 2304	SOIL FERTILITY	
AGR 2383	IRRIGATION MANAGEMENT	
AGR 2353	PEST MANAGEMENT	
Credit Hours Subtotal:		18
<b>Electives</b>		
Advisor Guided Electives		6
Credit Hours Subtotal:		6
Total Credit Hours		30

## Diversified Agriculture, Certificate

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

### Required General Education Credits

Complete requirements	6
Credit Hours Subtotal:	6

### Diversified Agriculture Emphasis

Select 12 credits from AGR, AEQ, ASI, or HSL courses	12
Credit Hours Subtotal:	12

### Electives

Advisor Guided Electives	12
Credit Hours Subtotal:	12

Total Credit Hours	30
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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)

## 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 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.

## 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. The program requires structured classes covering AVMA essential skills, an 8 week internship, passing the exit exam and a CGPA of 80%.

## Veterinary Technician Option Entrance Requirements

### Observation hours

Observation hours are a prerequisite for Facility Management class.

Incoming students need to spend 80 hours observing or working with technicians and veterinarians in a veterinary practice. We want prospective technicians to know the work and hours that go into caring for the animals people love and care for. Most clinics are very happy to let you observe once you explain that you are pursuing veterinary technology as a career.

### Background classes

A strong background in math and science is recommended.

### ACT Score

An ACT Score of 18 or higher is recommended to enroll in and complete the Veterinary Assistant or the 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, 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 session, 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) all required credit hours by the end of the semester. 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 higher. A maximum of two sections may be repeated during the provided repeat time. Each student must complete the required classes, have a CGPA of 80% and pass the Exit Exam to graduate with the Veterinary Technician Option.

### Final Assessment – Veterinary Assistant

Upon successful completion of the Veterinary Assistant Option students will be able to demonstrate the academic background needed to enter the work force as an entry level assistant. This is assessed through the VT Exit Exam. The Exit exam is taken at the same time as Technician Option students but without passing grade requirements

### Final Assessment - Veterinary Technology Animal Husbandry, Animal Health Care Management, Equine Healthcare

The 200 question written comprehensive final assessment is administered at the end of student's last on-campus semester/session.

### 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

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 (add) and be eligible to become a licensed technician.

## Veterinary Technician Option-Associate of applied science

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
Complete Requirements		18-20
VTS 1404	ANATOMY & PHYSIOLOGY	
VTS 1513	ANIMAL CARE	
VTS 2563	FUR AND FEATHER	
VTS 1511	INTRO TO ANIMAL SCIENCE	
PSY 1011	LEARNING COMMUNITIES	

VTS 1313	MATH FOR VET TECHS (or another college level math class)	
VTS 1301	MEDICAL TERMINOLOGY	
VTS 1542	FACILITY MANAGEMENT(Or Science)	
BIO 1104 or CHM 1104	GENERAL BIOLOGY (or ASI 1024-Fund Animal Bio; or BIO 1313 Plant Science; or CHM 1014 Intro to Chem I) or GENERAL CHEM I	
Credit Hours		20

#### Spring

Complete Requirements		17-19
VTS 1521	PRODUCTION ANIMALS I	
VTS 1713	PHARMACY-ANESTHESIA	
VTS 1822	RADIOLOGY I	
VTS 2583	NURSING I	
VTS 1603	INTRODUCTION TO LABORATORY SCIENCE	
AIT 1003	SOFTWARE PRODUCTIVITY	
VTS 1542	FACILITY MANAGEMENT(Or Science)	
CHM 1014	INTRODUCTION TO CHEMISTRY I (or ASI 1024; BIO 1313; CHM 1014; CHM 1104; BIO 1104)	
Credit Hours		18

#### Summer

Complete Requirements		8-11
VTS 2823	RADIOLOGY II	
SPC 1103	SALES COMM (Sales Comm)	
VTS 2652	PARASITOLOGY	
Nutrition (Equine, Canine, Livestock)		
Credit Hours		10

#### Second Year

##### Fall

Complete Requirements		18
VTS 2533	LARGE ANIMAL TECHNIQUES	
VTS 2593	NURSING II	
VTS 2933	ANESTHESIOLOGY	
VTS 2662	HEMATOLOGY	
VTS 2733	DISEASES OF VET MED	
VTS 2331 or ENG 1903	CLINICAL PRACTICES or COLLEGE COMP	
ENG 1503 or ENG 1903	BUSINESS & TECHNICAL WRITING or COLLEGE COMP	
Credit Hours		18

##### Spring

Complete Requirements		12
VTS 2241	CAREER STRATEGIES	
VTS 2672	CLINICAL PATHOLOGY	
VTS 2953	SURGERY PREPARATION ( )	
AED 1023	INTERPERSONAL SKILLS FOR LEADERSHIP	
Exit Exam		

#### 2nd 8 Weeks



VTS 2243	VETERINARY TECHNOLOGY INTERNSHIP	
	Credit Hours	12
	Total Credit Hours	78

**Students with ACT Less Than 18 will need to take:**

ENG 103	INTRODUCTION TO COLLEGE READING AND WRITING	3
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and complete the program over 3 years instead of 2 years, taking 12 to 15 hours each semester

**Veterinary Assistant Option-Associate of applied science**

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
Complete Requirements		18-20
VTS 1404	ANATOMY & PHYSIOLOGY	
VTS 1513	ANIMAL CARE	
VTS 2563	FUR AND FEATHER	
VTS 1511	INTRO TO ANIMAL SCIENCE	
PSY 1011	LEARNING COMMUNITIES	
VTS 1313	MATH FOR VET TECHS (Or other college level math)	
VTS 1301	MEDICAL TERMINOLOGY	
VTS 1542	FACILITY MANAGEMENT (or Science)	
	Credit Hours	18
<b>Spring</b>		
Complete Requirements		17-19
VTS 1521	PRODUCTION ANIMALS I	
VTS 1713	PHARMACY-ANESTHESIA	
VTS 1822	RADIOLOGY I	
VTS 2583	NURSING I	
VTS 1603	INTRODUCTION TO LABORATORY SCIENCE	
AIT 1003	SOFTWARE PRODUCTIVITY	
VTS 1542	FACILITY MANAGEMENT (or Science)	
	Credit Hours	19
<b>Summer</b>		
Complete Requirements		11
VTS 2823	RADIOLOGY II	
SPC 1103	SALES COMM	
VTS 2652	PARASITOLOGY	
Nutrition (Equine, Canine, Livestock)		
	Credit Hours	11
<b>Second Year</b>		
<b>Fall</b>		
Complete Requirements		18
VTS 2533	LARGE ANIMAL TECHNIQUES	
VTS 2593	NURSING II	
VTS 2662	HEMATOLOGY	
VTS 2933	ANESTHESIOLOGY	
VTS 2733	DISEASES OF VET MED	

VTS 2331	CLINICAL PRACTICES	
ENG 1503	BUSINESS & TECHNICAL WRITING (Business & Technical Writing)	
or		
ENG 1903	or COLLEGE COMP	
	Credit Hours	18

**Spring**

Complete Requirements		12
VTS 2241	CAREER STRATEGIES	
VTS 2672	CLINICAL PATHOLOGY	
VTS 2953	SURGERY PREPARATION	
AED 1023	INTERPERSONAL SKILLS FOR LEADERSHIP	

**2nd 8 Weeks**

VTS 2243	VETERINARY TECHNOLOGY INTERNSHIP	
	Credit Hours	12
	Total Credit Hours	78

**Animal Husbandry Option-Associate of Applied Science**

**Associate of Applied Science Core**

Complete Requirements		20
PSY 1011	LEARNING COMMUNITIES	
VTS 1313	MATH FOR VET TECHS	
	or MTH 1503 COLLEGE ALGEBRA	
AIT 1003	SOFTWARE PRODUCTIVITY	
SPC 1103	SALES COMM	
	or SPC 1113 SPEECH	
ENG 1503	BUSINESS & TECHNICAL WRITING	
	or ENG 1903 COLLEGE COMP	
AED 1023	INTERPERSONAL SKILLS FOR LEADERSHIP	
Biology or Chemistry		

**Veterinary Technology Courses and Internship** 7-8

VTS 1822	RADIOLOGY I	
	or VTE 2821 RADIATION SAFETY	
VTS 1542	FACILITY MANAGEMENT	
	or ASI 1442 EQUINE PRACTICUM I	
VTS 2243	VETERINARY TECHNOLOGY INTERNSHIP	
VTS 2241	CAREER STRATEGIES	

**Veterinary Technology Classes (advisor guided)** 30-32

VT or APS Advisory guided classes 14

**Electives** 3

Credit Hours Subtotal: 76

Total Credit Hours 76

**Students with ACT Less Than 18 will need to take:**

ENG 103	INTRODUCTION TO COLLEGE READING AND WRITING	3
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## Equine Health Option-Associate of Applied Science

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
VTS 1511	INTRO TO ANIMAL SCIENCE	1
PSY 1011	LEARNING COMMUNITIES	1
VTS 1313	MATH FOR VET TECHS	3
VTS 1301	MEDICAL TERMINOLOGY	1
VTS 1404	ANATOMY & PHYSIOLOGY	4
ASI 1501	EQUINE SAFETY	1
ASI 1442	EQUINE PRACTICUM I	2
VTE 1643	EQUINE HEALTH RECORDS	3
Credit Hours		16
<b>Spring</b>		
VTS 1521	PRODUCTION ANIMALS I	1
VTS 1713	PHARMACY-ANESTHESIA	3
VTS 1822	RADIOLOGY I	2
VTS 1603	INTRODUCTION TO LABORATORY SCIENCE	3
VTE 2611	EQUINE REPRODUCTION	1
AED 1023	INTERPERSONAL SKILLS FOR LEADERSHIP	3
AIT 1003	SOFTWARE PRODUCTIVITY	3
Credit Hours		16
<b>Summer</b>		
VTE 2623	FEEDING THE EQUINE PATIENT	3
SPC 1113	SPEECH	3
or SPC 1103	or SALES COMM	
Credit Hours		6
<b>Second Year</b>		
<b>Fall</b>		
VTS 2533	LARGE ANIMAL TECHNIQUES	3
ENG 1503	BUSINESS & TECHNICAL WRITING	3
or ENG 1903	or COLLEGE COMP	
VTE 1633	EQUINE DISEASES	3
VTE 1623	EQUINE LABORATORY DIAGNOSTICS	3
ACT 1103	ACCOUNTING I	3
ASI 2433	EQUINE INDUS MNGT I	3
Credit Hours		18
<b>Spring</b>		
VTE 2613	EQUINE SURGERY AND ANESTHESIA	3
VTE 2643	EQUINE NURSING	3
BIO 1313	PLANT SCIENCE (or ASI 1024; or CHM 1014)	3
VTS 2241	CAREER STRATEGIES	1
Electives		6
Choose 5 elective Credit hours from below over four semesters:		
ASI 1241	RANCH HORSE I	
ASI 2443	EQUINE INDUS MNGT II	
ASI 1253	NUTRITION	

ASI 2412	EQUINE MARKETING TECHNIQUES	
VTE 2342	SPANISH FOR VET TECH,SPANISH FOR ANIMAL HEALTH	
VTE 2811	ULTRASOUND	
ASI 1263	BASIC EQUITATION	
VTS 2652	PARASITOLOGY	
VTS 2823	RADIOLOGY II	
VTE 1611	CONCEPTS IN BITS	
VTE 2032	THE WORLD OF WORK	
VTS 1532		
Credit Hours		16
<b>Summer</b>		
VTS 2243	VETERINARY TECHNOLOGY INTERNSHIP	3
Credit Hours		3
Total Credit Hours		75

### Students with ACT Less Than 18 will take:

ENG 103	INTRODUCTION TO COLLEGE READING AND WRITING	3
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## Animal Health management option-Associate of applied science

76 Credit Hours

### College Core

ENG 1903	COLLEGE COMP	3
or ENG 1503	BUSINESS & TECHNICAL WRITING	
SPC 1103	SALES COMM	3
or SPC 1113	SPEECH	
MTH 1503	COLLEGE ALGEBRA	3
or VTS 1313	MATH FOR VET TECHS	
AIT 1003	SOFTWARE PRODUCTIVITY	3
PSY 1011	LEARNING COMMUNITIES	1
AED 1023	INTERPERSONAL SKILLS FOR LEADERSHIP	3
Select One Science Course from:		4
ASI 1024	FUND OF ANIMAL BIO	
BIO 1104	GENERAL BIOLOGY	
CHM 1104	GENERAL CHEM I	
CHM 1004	AGRICULTURAL CHEMISTRY	
BIO 1313	PLANT SCIENCE	
CHM 1014	INTRODUCTION TO CHEMISTRY I	

Credit Hours Subtotal: 20

### Internship

VTS 2243	VETERINARY TECHNOLOGY INTERNSHIP	3
Credit Hours Subtotal:		3

### Veterinary Technology Courses

VTS 1301	MEDICAL TERMINOLOGY	1
VTE 2322	INTRO TO VET OFFICE	2
VTE 2821	RADIATION SAFETY	1
VTS 2241	CAREER STRATEGIES	1
VTS 1603	INTRODUCTION TO LABORATORY SCIENCE	3
Credit Hours Subtotal:		8

**Select One Nutrition Class**

Total Requirements: 2-3

ASI 2262	EQUINE NUTRITION
ASI 1253	NUTRITION
VTE 2422	HILLS NUTRITION
VTE 2423	CANINE & FELINE NUTRITION

Credit Hours Subtotal: 2-3

**Select 13-14 Credit hours from the following:**

Total Requirements: 13-14

VTS 1404	ANATOMY & PHYSIOLOGY
VTS 1513	ANIMAL CARE
VTS 2563	FUR AND FEATHER
VTS 1521	PRODUCTION ANIMALS I
VTS 1542	FACILITY MANAGEMENT
VTS 1713	PHARMACY-ANESTHESIA
VTS 1822	RADIOLOGY I
VTS 2733	DISEASES OF VET MED
VTE 2342	SPANISH FOR VET TECH,SPANISH FOR ANIMAL HEALTH

Credit Hours Subtotal: 13-14

**Complete the following Business Management Courses:**

ACT 1103	ACCOUNTING I	3
MGT 2103	MGT CONCEPTS	3
ACT 1203	ACCOUNTING II	3
MGT 2503	HUMAN RESOURCES MGT	3

Credit Hours Subtotal: 12

**Select 12 Credit hours from the following Business Mgt Courses**

Total Requirement: 12

ABM 2103	PERSONAL FINANCE
ABM 2403	AG FINANCE
AJT 2503	PUBLIC RELATIONS
ABM 2854	FARM & RANCH MANAGEMENT
ECN 1203	MICROECONOMICS
ECN 1303	MACROECONOMICS
ABM 2503	AGRICULTURAL DECISION ANALYSIS
MKT 2103	RETAIL MARKETING
ABM 2903	ENTREPRENEURSHIP
AIT 2103	GRAPHIC DESIGN
AIT 2153	WEB DESIGN

Credit Hours Subtotal: 12

**Select 5 Credit hours from the following Production Ag and Vet Tech Courses:**

Total Requirement 5

ASI 1501	EQUINE SAFETY
ASI 1303	ANIMAL MANAGEMENT
ASI 2203	FEEDS & FEEDING
ASI 2353	LIVESTOCK BREEDING
VTE 1643	EQUINE HEALTH RECORDS
VTE 2612	EQUINE EMERGENCY MEDICINE AND NURSING
VTE 1633	EQUINE DISEASES
VTE 2613	EQUINE SURGERY AND ANESTHESIA

VTE 1623	EQUINE LABORATORY DIAGNOSTICS
VTE 2643	EQUINE NURSING
VTE 2811	ULTRASOUND
Credit Hours Subtotal: 5	

**Animal Care Certificate**

Select 12 hours from the following: 12

ASI 1501	EQUINE SAFETY
VTS 1511	INTRO TO ANIMAL SCIENCE
VTE 1021	BASIC DOG GROOMING
VTE 1403	ANATOMY AND PHYSIOLOGY
VTE 1512	ANIMAL CARE
or VTS 1513 ANIMAL CARE	
VTE 2101	DOG TRAINING
VTE 2322	INTRO TO VET OFFICE
VTS 1301	MEDICAL TERMINOLOGY
VTS 1313	MATH FOR VET TECHS
VTS 1404	ANATOMY & PHYSIOLOGY
VTS 1542	FACILITY MANAGEMENT
VTS 1603	INTRODUCTION TO LABORATORY SCIENCE

Total Credit Hours 12

**Laboratory Animal Care Certificate**

VTL 1113	LABORATORY ANIMAL MEDICINE I	3
VTL 1122	LABORATORY ANIMAL MEDICINE II	2
VTL 1133	LABORATORY ANIMAL MANAGEMENT	3
VTS 1262	LABORATORY ANIMAL INTERNSHIP	2
VTS 1301	MEDICAL TERMINOLOGY	1
VTS 1313	MATH FOR VET TECHS	3
VTS 1603	INTRODUCTION TO LABORATORY SCIENCE	3
VTS 2563	FUR AND FEATHER	3

Total Credit Hours 20

**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.

## **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

# NCTA HONORS PROGRAM

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## 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.

# ADMINISTRATION AND FACULTY

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## NCTA Administration and Faculty Academic Credentials

**RON ROSATI, Ph.D., 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

**JOHN PORTER., Assistant Professor**

B.S., Marshall University 2004  
M.S., West Virginia University 2008

**BRAD RAMSDALE, Ph.D., 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, Ph.D., 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

# COURSES

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## A

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- Agricultural Business Management (ABM) (p. 39)
- Agricultural Equipment (AEQ) (p. 40)
- Agricultural Information Technology (AIT) (p. 42)
- Agriculture (AGR) (p. 43)
- Agriculture Education (AED) (p. 45)
- Animal Science (ASI) (p. 46)

## B

- Biology (BIO) (p. 51)

## C

- Chemistry (CHM) (p. 52)

## E

- Economics (ECN) (p. 53)
- English (ENG) (p. 53)

## G

- Geography (GEO) (p. 54)

## H

- History (HTY) (p. 54)
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- Horticulture Science (Landscaping) (HSL) (p. 54)
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## M

- Management (MGT) (p. 55)
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## P

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## S

- Sociology (SOC) (p. 57)
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## V

- Veterinary Technology (Electives) (VTE) (p. 57)
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- Veterinary Technology (VTL) (p. 64)

## Accounting (ACT)

### ACT 1103 ACCOUNTING I

**Description:** This course is a study in the fundamentals of accounting concepts and procedures. Concepts include financial reporting and analysis.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ACT 1203 ACCOUNTING II

**Description:** 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. (Pre req: ACT 1103)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ACT 1303 PRODUCTION ACCTING

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Agricultural Business Management (ABM)

### ABM 1803 BUSINESS STATISTICS

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ABM 2003 CRITICAL THINKING

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ABM 2004 INTERNSHIP

**Description:** 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. (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)

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** FLD

**ABM 2103 PERSONAL FINANCE**

**Description:** Following the Dave Ramsey "Foundations in Personal Finances", College Edition, students will develop practical and relevant personal financial skills.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ABM 2403 AG FINANCE**

**Description:** 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. (Pre req: ACT 1103 and MTH 1203 or MTH 1503)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ABM 2503 AGRICULTURAL DECISION ANALYSIS**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ABM 2854 FARM & RANCH MANAGEMENT**

**Description:** (Pre req: ECN 1103 and ACT 1103 or ABM 2963) 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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**ABM 2903 ENTREPRENEURSHIP**

**Description:** 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. (Pre req: ACT 1103, MGT 2103, ACT 1203 or enrolled in ACT 1203)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ABM 2911 SEMINAR**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ABM 2963 Farm, Ranch, and Small Business Record Keeping**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ABM 2991 INDEPENDENT STUDY**

**Description:** 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. (Pre req: Approval of project by Instructor, Advisor, and Division Chair)

**Credit Hours:** 1-3

**Min credits per semester:** 1

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** IND

**ABM 2992 INDEPENDENT STUDY**

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** IND

**ABM 2993 INDEPENDENT STUDY**

**Credit Hours:** 1-3

**Min credits per semester:** 1

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** IND

## Agricultural Equipment (AEQ)

**AEQ 1071 INDUSTRIAL SAFETY**

**Description:** Designed to acquaint students with standard industry practices and emergency procedures and develop an awareness of job hazards. Students will prepare for a CPR/First Aid exam and receive some bulk handling equipment training (forklift/skid steer).

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AEQ 1103 SMALL ENGINES**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC



**AEQ 1153 EQUIPMENT PRINCIPLES**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AEQ 1171 FARM EQUIP & SAFETY**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AEQ 1203 WELDING**

**Description:** Develop fundamental skills and procedures for oxy/acetylene, arc, and wire feed welding in flat position. Included will be basic blueprint interpretation and weld symbols, with metal cutting and preparation techniques.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AEQ 1313 INTERMEDIATE WELDING**

**Description:** (Pre req: AEQ 1203 or equivalent) Develop skills in vertical, horizontal and overhead position arc and wire feed welding. Plasma Arc Cutting and a small assigned construction project are included. Use of a spool gun and TIG equipment will be introduced.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**AEQ 1501 INTRODUCTION TO ELECTRIC CODE**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AEQ 1503 DC CIRCUIT ANALYSIS**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**AEQ 1513 AC CIRCUIT ANALYSIS**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**AEQ 1651 HARVEST OPERATIONS**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

**AEQ 1713 CARPENTRY**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**AEQ 2103 AG CHEM APPLICATOR**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AEQ 2211 HYDRAULICS**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AEQ 2214 ADVANCED WELDING**

**Description:** (Pre req: AEQ 1313 or equivalent) Students will develop skills using a spool gun and TIG welding, and additional arc and wire feed welding on a wide variety of metals. The second eight weeks is devoted toward preparation for American Welding Society certification.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LLB

**AEQ 2303 EQUIP PREVENTATIVE MAINTENANCE**

**Description:** 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).

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**AEQ 2323 PRECISION FARM TECH**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AEQ 2404 MECHANIZED IRRIGATION SYSTEMS**

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

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LLB

**AEQ 2413 DIESEL ENGINE**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**AEQ 2604 WELDING APPRENTICESHIP**

**Description:** (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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** FLD

**AEQ 2801 REINKE CERTIFICATION**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

# Agricultural Information Technology (AIT)

**AIT 1003 SOFTWARE PRODUCTIVITY**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AIT 1052 INTRODUCTION TO MSWORD**

**Description:** This course will introduce the student to the basics of word processing using Microsoft Word.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**AIT 1053 COMPUTER APPLICATIONS**

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AIT 1062 INTRODUCTION TO MS POWERPOINT**

**Description:** This course will introduce the student to the basics of presentation using Microsoft PowerPoint.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**AIT 1072 INTRODUCTION TO DATABASES**

**Description:** (Pre req: AIT 1092) This course will introduce the student to the basics of relational databases using Microsoft Access.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LLB

**AIT 1073 INTRODUCTION TO DATABASES**

**Description:** 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. (Pre req: AIT 1092)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**AIT 1083 DESKTOP PUBLISHING & WEB DESIGN BASICS**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AIT 1092 INTRODUCTION TO SPREADSHEETS**

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

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LLB

**AIT 2103 GRAPHIC DESIGN**

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AIT 2153 WEB DESIGN**

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AIT 2503 ADVANCED SPREADSHEET APPLICATIONS FOR AGRICULTURE**

**Description:** Introduction to quantitative decision-making methods for effective agribusiness management, emphasis on problem identification, model formulation and solution, interpretation and presentation of results using MS Excel..

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Agriculture (AGR)

**AGR 1011 AGRICULTURAL CAREERS**

**Description:** Students will be exposed to the great diversity of careers that support the agricultural industry. Educational requirements to prepare for these agricultural careers will also be explored.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AGR 1091 CROP PRACTICUM I**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AGR 1103 CROP SCIENCE**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 1116 AGRICULTURE APPLICATIONS**

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

**Credit Hours:** 6

**Max credits per semester:** 6

**Max credits per degree:** 6

**Format:** LLB

**AGR 1201 SOILS LAB**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

**AGR 1203 PRINCIPLES OF SOILS**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 1213 NATURAL RES MNGT**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 1591 CROP PRACTICUM II**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LLB

**AGR 1603 INTRODUCTION TO URBAN AGRICULTURE**

**Description:** An introduction to the history, definitions, principles, practices, and innovations of agricultural production in urban and pe-urban settings. Topics will include urban farming systems including traditional and emerging systems such as controlled environment and hydroponics, animal systems in urban settings, urban food systems, community gardens, policies regarding urban agriculture, food access and security, urban agriculture's role in community and society, agricultural marketing in urban setting, and sustainable urban agricultural best practices.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 1891 CROPS JUDGING I**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 3

**Format:** LEC

**AGR 1991 INDEPENDENT STUDY**

**Description:** 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. (Pre req: Approval of project by Instructor, Division Chair, and Advisor)

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** IND

**AGR 2002 WILDLIFE HABITAT MGT**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**AGR 2091 CROP PRACTICUM III**

**Description:** (Pre-req: AGR 1591 Crop Practicum II) This is the third of a 3-course sequence that integrates students into the crop production o 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AGR 2103 BUILDING CONSTRUCTION**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 2153 ORGANIC FOOD PRODUCTION**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 2201 COMMERCIAL AG CARRIER**

**Description:** 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. (Pre req: Must be a full time NCTA student)

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**AGR 2304 SOIL FERTILITY**

**Description:** 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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**AGR 2353 PEST MANAGEMENT**

**Description:** Identification of plant pests, including morphology and life cycles of selected insects, weeds and diseases. Pest control methods will include chemical, physical, mechanical, cultural and biological techniques. Application of integrated pest management will be stressed.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 2383 IRRIGATION MANAGEMENT**

**Description:** Efficient irriagation 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 2403 CROP MANAGEMENT**

**Description:** Integration of principles of crop and soil science, plant breeding, climatology and integrated pest management in the development and evaluation of crop management practices. Students will be able to apply economically sound and environmentally sustainable crop production strategies in the Great Plains.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 2714 FARM BEGINNINGS**

**Description:** 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 financials management. In addition to learning first-hand from successful farmers, participants will develop their own business plan as they progress through the course.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**AGR 2892 CROPS JUDGING II**

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

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 6

**Format:** LEC

**AGR 2903 INTERNSHIP**

**Description:** (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 with their presentation. The student and employer will also complete a survey at the conclusion of the internship.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** FLD

**AGR 2943 FARM AND RANCH CAPSTONE**

**Description:** (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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AGR 2992 INDEPENDENT STUDY**

**Description:** 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. (Pre req: Approval of project by Instructor, Advisor, and Division Chair)

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** IND

## Agriculture Education (AED)

**AED 1023 INTERPERSONAL SKILLS FOR LEADERSHIP**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AED 1101 EARLY FIELD EXPERIENCE**

**Description:** Early Field Experience in AED (I II) Required of all Ag Ed Departmental majors. Observing and/or performance of professional skills in agricultural education, extension education, agribusiness, journalism, and leadership.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** FLD

**AED 1103 INTRODUCTION TO SECONDARY AGRISCIENCE EDUCATION**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AED 1233 PLANNING, LEADERSHIP AND EXPERIENTIAL PROGRAMS**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AED 2103 YOUTH PROGRAMS**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**AED 2503 LIVESTOCK PRACTICUM**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Animal Science (ASI)

**ASI 1002 ANIMAL AGRICULTURE**

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1011 INTRO TO ANIMAL SCI**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**Prerequisite for:** VTS 1521

**ASI 1013 LVST HANDLING & PRODUCTION TEC**

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LAB

**ASI 1021 100 BEEF COW OWNERSHIP SEMINAR I**

**Description:** This Seminar is required for students in the 100 Beef Cow Ownership Advantage Program. During this seminar students will develop their long term and short term goals and layout their plan for reaching these goals. Tentative partners will be identified. A power point will be developed to explain their plan in an oral presentation given to the class. Prerequisite: 1st year students in the 100 Beef Cow Ownership Advantage Program.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ASI 1024 FUND OF ANIMAL BIO**

**Description:** 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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**ASI 1031 RODEO SEMINAR**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 6

**Format:** LEC

**ASI 1111 INTRO LIVSTK ANI MRKT**

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ASI 1161 INTRO TO HORSEMANSHIP**

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ASI 1201 SHOOTING SPORTS**

**Description:** The purpose of this class is to offer a variety of trap shooting programs, encompassing leisure recreation and competitive shooting, including leagues and/or collegiate competition while providing a social network for knowledge and training in the shooting sports. Students will learn firearm safety. Students will become familiar with different firearms, their purpose and mode of action. This class may provide opportunity to earn Nebraska hunter safety card.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** FLD

**ASI 1202 FEEDLOT OPERATIONS**

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1203 FEEDLOT SYSTEMS**

**Description:** 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. (Pre req: ASI 1253 & ASI 1303)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**ASI 1204 FEEDLOT OPERATIONS**

**Description:** (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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**ASI 1213 LIVESTK & CARC EVAL**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 1222 ADV LVSTK EVAL/JUDG**

**Description:** 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. (Pre req: ASI 1213 or instructor permission)

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1241 RANCH HORSE I**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

**ASI 1253 NUTRITION**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 1263 BASIC EQUITATION**

**Description:** (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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LAB

**ASI 1303 ANIMAL MANAGEMENT**

**Description:** 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 suited.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 1312 LIVESTOCK JUDGING I**

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

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1341 RANCH HORSE II**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

**ASI 1351 ART INSEM BEEF CATTL**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ASI 1432 EQUINE CARE**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1442 EQUINE PRACTICUM I**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1462 COMPET EQUITATION**

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1471 HORSE SHOW TEAM I**

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 6

**Format:** LEC

**ASI 1501 EQUINE SAFETY**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ASI 1752 RAISING POULTRY FOR PROFIT: SMALL-SCALE PRODUCTION**

**Description:** An overview of small-scale poultry production for meat and eggs. Topics include species, breeds, management of young and mature birds, housing, pasturing, feeding, breeding, harvesting, food safety, basic health care, and marketing.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 1991 INDEPENDENT STUDY**

**Description:** 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. (Pre req: Approval of project by Instructor, Division Chair, and Advisor)

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** IND

**ASI 2021 100 BEEF COW OWNERSHIP SEMINAR II**

**Description:** This Seminar is required for students in the 100 Beef Cow Ownership Advantage Program. Topics to be explored include: Farm/Ranch transitions, legal documents for the farm/ranch business organization, working with family members, working with loaning institutions. Prerequisite: 2nd year students in the 100 Beef Cow Ownership Advantage Program.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ASI 2031 RODEO SEMINAR**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 6

**Format:** LEC

**ASI 2133 PROD PHARMACOLOGY**

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2203 FEEDS & FEEDING**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2223 EQUINE LAW/FIN MNGT**

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2262 EQUINE NUTRITION**

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 2303 RANGE MANAGEMENT**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2312 LIVESTOCK JUDGING II**

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

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 2313 RATION FORMULATION**

**Description:** 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. (Pre req: ASI 1253, ASI 2203, AIT 1053 or permission)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC



**ASI 2321 COW-CALF COLLEGE****Credit Hours:** 1-2**Min credits per semester:** 1**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2322 FEEDLOT WRKSHOP****Credit Hours:** 1-3**Min credits per semester:** 1**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**ASI 2332 LIVESTOCK JUDGING III****Description:** A continuation of ASI 2312. (Pre req: ASI 2312)**Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2352 LVSTK/ANIM SALES MGT****Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2353 LIVESTOCK BREEDING****Description:** A course in the principles of genetics and hereditary characteristics applied to livestock production, including production records, selection, and design of mating systems.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**ASI 2362 ADVANCED EQUITATION****Description:** 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. (Pre req: ASI 1263 or permission, limited enrollment)**Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2363 INTERMEDIATE TRAINING****Description:** Students will acquire skills in intermediate horsemanship (including equitation and training techniques) and green-breaking. Students, with the aid of the instructor, will set and achieve individual objectives.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LLB**ASI 2372 FEEDLOT SEMINAR****Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2383 LARGE ANIMAL DISEASE****Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**ASI 2384 LG AN DISEASE & PHARM****Description:** 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.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**ASI 2401 EQUINE IND TOPICS****Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** IND**ASI 2402 EQUINE JUDGING****Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2403 MONITORING TECHNIQUES AND DATA COLLECTION****Description:** 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.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**ASI 2411 EQUINE MARKETING****Description:** This course will cover a range of topics pertaining to the marketing and sales of horses. This will include the fitting of horses for sale, handling techniques and taking appropriate photographs and videos. Proper use of the farrier, as well as appropriate advertising will also be covered.**Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** LEC**ASI 2412 EQUINE MARKETING TECHNIQUES****Description:** 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.**Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LLB

**ASI 2433 EQUINE INDUS MNGT I**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2442 EQUINE PRACTICUM II**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**ASI 2443 EQUINE INDUS MNGT II**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2453 SEEDSTOCK PREPARATION AND MARKETING**

**Description:** This course is designed for students to develop the skills of marketing seedstock such as cattle, sheep, and swine. Students will learn various methods of preparing seedstock for live/video auctions. The student will have hands on experience of preparing livestock for sale.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2462 COLT STARTING**

**Description:** 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. (By Permission)

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LAB

**ASI 2463 ADVANCED PERFORMANCE TRAINING**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LLB

**ASI 2471 HORSE SHOW TEAM II**

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 6

**Format:** LEC

**ASI 2513 MEAT SCIENCE**

**Description:** 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. (Pre req: ASI 1303)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2514 MEAT PROCESSING**

**Description:** Meat processing is designed to show students how to properly process livestock carcasses. Understanding of HAACP, BQA, PQA, and management of the various species will be stressed. This is a career applied course which could lead to working in the processing industry or owning their own business.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**ASI 2523 MUSCLE BIOLOGY**

**Description:** This course will provide an advanced education in understanding the muscles and the biology surrounding the muscles of livestock species for the purpose of providing high quality carcasses.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2603 LIVESTOCK ANATOMY AND PHYSIOLOGY**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ASI 2604 LIVSTCK ANAT & PHYSO**

**Description:** 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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**ASI 2611 EQUINE REPRODUCTION****Crosslisted with:** VTE 261 1**Description:** (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.**Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** LEC**ASI 2612 EQUINE REPRODUCTION****Description:** 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.**Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2673 BEEF PRODUCTION SYSTEMS (ONLINE)****Description:** The economics, breeds, selection, nutrition, breeding and management of beef cattle is the focus of this course. This course will be taught via online without the lab component and credit for laboratory time.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**ASI 2753 BEEF PRODUCTION SYSTEMS****Description:** (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.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LLB**ASI 2773 ADVANCED REPRODUCTIVE PHYSIOLOGY****Description:** (Pre req: Anatomy & Physiology w/ 70%; Animal Management; AI of Beef Cattle) The objective of this course is to promote an understanding of reproductive processes in domestic animals. The students will understand the processes of reproduction in the various livestock species.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**ASI 2774 BEEF PROD SYSTEMS****Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**ASI 2804 SWINE PRODUCTION****Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**ASI 2861 BRAND INSP & SAFETY****Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** LEC**ASI 2862 FEEDLOT SAFETY SEMINAR****Credit Hours:** 1-2**Min credits per semester:** 1**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC**ASI 2864 NEBR RANCH PRACTICUM****Description:** 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](http://www.panhandle.unl.edu/ranchpracticum). (Pre req: Advisor permission only)**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** FLD**ASI 2906 INTERNSHIP****Description:** 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. (Pre req: Approval by Division Chair)**Credit Hours:** 6**Max credits per semester:** 6**Max credits per degree:** 6**Format:** FLD**ASI 2991 INDEPENDENT STUDY****Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** LEC**ASI 2992 INDEPENDENT STUDY****Description:** 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. (Pre req: Approval of project by Instructor, Division Chair, and Advisor)**Credit Hours:** 2**Max credits per semester:** 2**Max credits per degree:** 2**Format:** LEC

## Biology (BIO)

**BIO 1003 BIOLOGICAL SCIENCE****Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC

**BIO 1101 GENERAL BIOLOGY LAB****Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 2**Format:** LAB**BIO 1103 GENERAL BIOLOGY****Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**BIO 1104 GENERAL BIOLOGY****Description:** Examination of fundamental principles of plant and animal biology including cell biology, genetics, development, diversity, and ecology.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**BIO 1114 INTRO MICROBIOLOGY****Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**BIO 1313 PLANT SCIENCE****Description:** 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.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**BIO 1321 AGRONOMIC PLANT SCIENCE LABORATORY****Description:** 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 agronomic importance.**Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** LAB**BIO 1331 INTRODUCTION TO HORTICULTURAL SCIENCE LABORATORY****Description:** Introduction to and practical experience in the production and usage of horticultural plants.**Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** LAB**BIO 2094 GENERAL BOTANY****Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC

## Chemistry (CHM)

**CHM 1004 AGRICULTURAL CHEMISTRY****Description:** Basic concepts of chemistry will be studied and then applied to properties of chemical bonding of water, soil, pH, and structure functions of organic compounds. Emphasis, in turn will be placed on agricultural applications of these concepts to fertilizer, nutritional and physiological cycles, and environmental relationships.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**CHM 1014 INTRODUCTION TO CHEMISTRY I****Description:** Prerequisite: 1 year of high school algebra or 1 semester of a college math course. The extraordinary chemistry of ordinary things. The chemical model of solids, liquids, gases, molecules, and salts. How these models are used to explore chemical aspects of biological, social, or economic situation.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**CHM 1024 INTRODUCTION TO CHEMISTRY II****Description:** Prerequisite: CHEM 1014: Introduction to Chemistry I. How organic chemistry and biochemistry complement one another. Chemical aspects of biological, social, or economic situations.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**CHM 1104 GENERAL CHEM I****Description:** Prerequisites: Two years of high school algebra and one year of high school chemistry or two years of high school algebra and CHM 1014. Lecture and laboratory serving as an introduction to chemical reactions, the mole concept, properties of the states of matter, atomic structure, periodic properties, chemical bonding and molecular structure.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**CHM 2104 GENERAL CHEM II****Description:** Prerequisites: CHM 1104: General Chemistry I Lecture and laboratory serving as an introduction to inter-molecular forces, kinetics, chemical equilibrium, thermodynamics, and electrochemistry.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC

## Economics (ECN)

### ECN 1103 INTRODUCTION TO AG ECONOMICS

**Description:** 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 developing an understanding of the interconnectedness of agricultural supply businesses, farm and ranch production, food markets, distribution and consumption.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ECN 1203 MICROECONOMICS

**Description:** Analysis and evaluation of markets. Demand, supply, elasticity, production costs, consumption utility, monopoly, competition, monopolistic competition, oligopoly, allocate and technical efficiency, and income distribution. Resource markets, unions, antitrust laws, agriculture, international trade, and other economic problems and policies. Students on campus will need permission to enroll.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ECN 1303 MACROECONOMICS

**Description:** Introduction to the nature and methods of economics. Economic systems. Measurement and analysis of aggregate variables, such as National income, consumption, saving, investment, international payments, employment, price indices, money supply, and interest rates. Fiscal, monetary, and other policies for macroeconomic stabilization and growth. No prerequisites.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ECN 1403 ECONOMICS OF WORLD FOOD AND AGRICULTURE

**Description:** 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. (Pre req: ECN 1203)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## English (ENG)

### ENG 1091 BASIC ENG & CULTURAL AWARENESS

**Credit Hours:** 1-3

**Min credits per semester:** 1

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ENG 1503 BUSINESS & TECHNICAL WRITING

**Prerequisites:** ENG 0080 AND ENG 0090

**Description:** (Pre Req: 18 ACT Reading & 18 ACT English or ENG 0103 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**Prerequisite for:** ENG 2203

### ENG 1901 BASIC ENG & CULTURAL AWARENESS

**Credit Hours:** 1-3

**Min credits per semester:** 1

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ENG 1903 COLLEGE COMP

**Prerequisites:** ENG 0080 AND ENG 0090

**Description:** (Pre Req: 18 ACT Reading & 18 ACT English or ENG 0103 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**Prerequisite for:** ENG 2203

### ENG 2103 SHORT STORIES

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ENG 2203 ADV COMPOSITION

**Prerequisites:** ENG 1503 OR ENG 1903

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### ENG 2223 INTRODUCTION TO CREATIVE WRITING

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Geography (GEO)

### GEO 1103 EARTH SCIENCE

**Description:** An overview of the process that affect the earth and its structures this will include the formation, deterioration, and renewal of those structures. Also includes how elements cycle through the earth's systems and what affect they have on a healthy and productive ecosystem.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## History (HTY)

### HTY 1303 AMERICAN HISTORY AFTER 1877

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Honors Program (HON)

### HON 1001 HONORS SEMINAR I

**Description:** The first of two 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 activities in the student's area of interest. A faculty member at NCTA and perhaps WCREC will be selected to advise the Honor's Project.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

### HON 2001 HONORS SEMINAR II

**Description:** The second of two courses for students accepted into NCTA's Honor 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 to relevant professional societies is encouraged.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

## Horticulture Science (Landscaping) (HSL)

### HSL 1053 LANDSCAPE APPRECIATION

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### HSL 1073 LANDSCAPE PLANTS I

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### HSL 1103 PLANT PROPAGATION

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### HSL 1173 LANDSCAPE PLANTS II

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### HSL 2003 INTERNSHIP

**Description:** (Pre req: approval by Division Chair) The internship provides job experience in your field of study at and 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** FLD

**HSL 2283 LANDSCAPE MANAGEMENT**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**HSL 2314 NURSERY & GREENHOUSE PRODUCTION**

**Description:** 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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**HSL 2322 ORGANIC HORTICULTURE**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**HSL 2324 FARMER'S MARKET**

**Description:** 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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**Horticulture Science (Turf) (HST)****HST 2353 PEST MANAGEMENT**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**Management (MGT)****MGT 1103 PRINCIPLES OF LEADERSHIP**

**Description:** Participants will demonstrate a foundational understanding of the principles and practices of organizational psychology, including how organizational factors contribute to individual behavior and how individuals affect groups and organizational functioning. emphasis is on such traditional topics as work motivation, job satisfaction and other attitudes, leadership, communication, socialization, and organization and job design.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**MGT 2103 MGT CONCEPTS**

**Description:** 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. (Pre req: ECN 1203, ACT 1103 or ABM 2963)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**MGT 2503 HUMAN RESOURCES MGT**

**Description:** 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. (Pre req: MGT 2103)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**Marketing (MKT)****MKT 2103 RETAIL MARKETING**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**MKT 2203 AG MARKETING**

**Description:** 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. (Pre req: ECN 1203)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Mathematics (MTH)

### MTH 1203 INTERMEDIATE ALGEBRA

**Prerequisites:** Test Placement

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### MTH 1403 Agricultural Mathematics

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### MTH 1503 COLLEGE ALGEBRA

**Prerequisites:** Ag Math, Intermediate Algebra, or Test Placement

**Description:** Prerequisites: 21 ACT in Math or equivalent test score; MTH 1203: Intermediate Algebra; or instructor permission) Description: 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### MTH 2203 ELEM OF STATISTICS

**Prerequisites:** Ag Math, Intermediate Algebra, College Algebra, or Test Placement

**Description:** Prerequisites: 24 ACT in Math or equivalent test score; MTH 1503: College Algebra; or instructor permission) Description: Frequency distributions, elementary probability theory, measures of dispersion and central tendency, normal distributions, confidence intervals, hypotheses testing, regression, and correlation.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### MTH 2252 TRIGONOMETRY

**Description:** Prerequisites: 24 ACT in Math or equivalent test score; MTH 1503: College Algebra; or instructor permission) Description: Designed for students who plan further study at the calculus level. Numerical trigonometry. trigonometric analysis, inverse trigonometric functions, and complex numbers.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

### MTH 2353 APPLIED CALCULUS

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### MTH 2455 GEOMETRY & CALC I

**Credit Hours:** 5

**Max credits per semester:** 5

**Max credits per degree:** 5

**Format:** LEC

## Philosophy (PHL)

### PHL 1103 CRITICAL THINKING

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### PHL 2233 INTRO PHIL OF HIST

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Physical Activity Education (PAE)

### PAE 1011 FITNESS CENTER

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

### PAE 1021 GOLF

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

### PAE 1031 BASKETBALL

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

### PAE 1041 VOLLEYBALL

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB



## Psychology (PSY)

### PSY 1011 LEARNING COMMUNITIES

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

### PSY 1013 INTRO TO PSYCHOLOGY

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### PSY 1102 HUMAN RELATIONS

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

### PSY 1103 HUMAN RELATIONS

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### PSY 2103 ORGANIZATIONAL PSYCHOLOGY

**Description:** (Pre req: PSY 2103) Participants will demonstrate a foundational understanding of the principles and practices of organizational psychology, including how organizational factors contribute to individual behavior, and how individuals affect groups and organizational functioning. Emphasis is on such traditional topics as work motivations, job satisfaction and other attitudes, leadership communication, socialization, and organization and job design.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Sociology (SOC)

### SOC 1103 INTRODUCTION TO SOCIOLOGY

**Description:** Introduction to the sociological study of human behavior, especially social organization, culture, and the social institutions that comprise society. Attention to social change, differentiation and inequality, and other social issues.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Spanish (SPN)

### SPN 1115 BEGINNING SPANISH I

**Description:** 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.

**Credit Hours:** 5

**Max credits per semester:** 5

**Max credits per degree:** 5

**Format:** LLB

### SPN 1142 SPANISH

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

## Speech (SPC)

### SPC 1103 SALES COMM

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

### SPC 1113 SPEECH

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Veterinary Technology (Electives) (VTE)

### VTE 1021 BASIC DOG GROOMING

**Description:** (Lab 1 hr) 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTE 1401 Anatomy & Physiology Lab**

**Description:** This class includes the clinical skills (labs) for VTE 1403 Anatomy. Basic body systems are studied at the tissue, organ and systems 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 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. Student must have a grade of at least 70% (C) to use as a pre-requisite course.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

**VTE 1403 ANATOMY AND PHYSIOLOGY**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 1511 ANIMAL CARE LAB**

**Description:** This lab course contains the clinical skills corresponding to VTE 1512 Animal Care. Both VTE 1512 and VTE 1511 must be taken and passed with a 70% to take Nursing I.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

**VTE 1512 ANIMAL CARE**

**Description:** 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, feeding, basic nursing skills, normal values, administration techniques, basic grooming and sample collection are included. Both VTE 1512 and VTE 1511 must be taken and passed with a 70% to take Nursing I.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 1611 CONCEPTS IN BITS**

**Description:** 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 bit's role is in riding.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTE 1621 CALVING ROTATION I**

**Description:** Students observe and assist in calving. Enrollment limited. (Pre req: VTS 2532 Lg Animal Techniques, VTS 2593 Nursing II)

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** FLD

**VTE 1623 EQUINE LABORATORY DIAGNOSTICS**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 1633 EQUINE DISEASES**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 1643 EQUINE HEALTH RECORDS**

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

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2011 LIFETIME LEARNING**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTE 2023 EMERGENCY MEDICINE**

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2031 EMERGENCY MEDICINE**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** FLD

**VTE 2032 THE WORLD OF WORK**

**Description:** 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. (Pre req: VT faculty permission)

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** FLD

**VTE 2041 MAKING A DIFFERENCE**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** FLD

**VTE 2101 DOG TRAINING**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTE 2322 INTRO TO VET OFFICE**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 2342 SPANISH FOR VET TECH**

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 2422 HILLS NUTRITION**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 2423 CANINE & FELINE NUTRITION**

**Description:** This is an introductory canine and feline nutrition course. The course provides identification and function of nutrients, understanding pet food labels, and nutritional applications for well and unwell pets. It takes into account the various life stages of dogs and cats and disease processes that diet can affect.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2522 EXOTIC PETS SELECTION & CARE**

**Description:** This 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 this course.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 2532 BASIC BIRD BEHAVIOR AND TRAINING METHODS**

**Description:** 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 utilized within the class.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 2542 WALK THE WILD SIDE**

**Description:** 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. (Pre req: Enrollment in Veterinary Technology)

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 2552 FACILITY MANAGEMENT II**

**Description:** 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LLB

**VTE 2553 EXOTICS**

**Description:** (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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2573 SAFARI**

**Description:** 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. (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).

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2611 EQUINE REPRODUCTION**

**Crosslisted with:** ASI 2611

**Description:** (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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTE 2612 EQUINE EMERGENCY MEDICINE AND NURSING**

**Description:** This course explores the world of equine emergencies and nursing care of the horse. It will discuss how to help owners determine true emergencies in the horse versus problems that can wait until morning to see the veterinarian. First aid care and the continued nursing that is needed through recovery. Signs of colic and how to react, splint use and application, emergency drugs to have on hand, controlling hemorrhage, bandaging, wound care, respiratory emergencies and foaling emergencies will be discussed.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTE 2613 EQUINE SURGERY AND ANESTHESIA**

**Description:** (Pre-req: Equine Nursing or concurrent enrollment) 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 for 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2621 CALVING ROTATION II**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** FLD

**VTE 2623 FEEDING THE EQUINE PATIENT**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2634 EQUINE DENTISTRY**

**Description:** Students gain an understanding in theories and techniques of equine dentistry. 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. (Pre req: Must be a DVM, LVT, or a student who has completed 35 hours of an AVMA accredited program)

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**VTE 2643 EQUINE NURSING**

**Description:** (Pre-req: Production Animals) This course provides information for veterinary technicians, veterinary assistants and equine health care students to enhance and focus their understanding of equine nursing concepts.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2743 VT OVERVIEW**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTE 2811 ULTRASOUND**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTE 2821 RADIATION SAFETY**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

## Veterinary Technology (Systems) (VTS)

**VTS 1262 LABORATORY ANIMAL INTERNSHIP**

**Description:** 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. (Pre req: Lab Animal Med II)

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** FLD

**VTS 1301 MEDICAL TERMINOLOGY**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTS 1313 MATH FOR VET TECHS**

**Description:** This course is specifically designed to prepare students for the mathematics used on a daily basis in veterinary nursing as well on 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 1404 ANATOMY & PHYSIOLOGY**

**Description:** 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.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**VTS 1511 INTRO TO ANIMAL SCIENCE**

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

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTS 1513 ANIMAL CARE**

**Description:** 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 and obtaining objective patient data. 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 1521 PRODUCTION ANIMALS I**

**Prerequisites:** ASI 1011 Intro to Animal Science - a grade of 70% or higher

**Description:** Prerequisites: Intro to Animal Science - a grade of C (70%) or higher (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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTS 1542 FACILITY MANAGEMENT**

**Description:** (Pre req: 80 observation hours in a veterinary clinic) 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 the wide variety of animals involved in the veterinary technology program. This class includes daily and weekend care for the animals. As a prerequisite for Nursing II it must be passed with a C or above.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LAB

**VTS 1603 INTRODUCTION TO LABORATORY SCIENCE**

**Description:** Through the application of fundamental biology, students will survey the biological world in association with production animals and human health. Topics include parasitology, hematology, bacteriology, virology and 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 1713 PHARMACY-ANESTHESIA**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 1822 RADIOLOGY I**

**Description:** (Pre req: 18 years of age, and a 70% or above in Anatomy) The student is presented with an overview of radiation safety, the generation of x-rays, machine operation and maintenance, patient positioning, radio-graphic film exposure, film developing, CI imaging, 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, film developing and computerized imaging storage techniques. A grade of 70% or higher in Radiology I is required to take Radiology II.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTS 2241 CAREER STRATEGIES**

**Description:** 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.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**VTS 2243 VETERINARY TECHNOLOGY INTERNSHIP**

**Description:** (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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** FLD

**VTS 2331 CLINICAL PRACTICES**

**Description:** This class provides practical experience and preparation for working in a 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. (Pre req: Parasitology, Radiology I or Radiation Safety Short Course and Nursing I)

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LAB

**VTS 2533 LARGE ANIMAL TECHNIQUES**

**Description:** (Pre req: Production Animals with a grade of 70% (C) or above) This course includes nursing procedures, radiology, and surgery for production animals 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 2551 LARGE ANIMAL CLINICAL ROTATION**

**Description:** (Pre req: grade of "C" or better in Large Animal Techniques) Students will have several extended days (32+ 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).

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** FLD

**VTS 2563 FUR AND FEATHER**

**Description:** 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 2583 NURSING I**

**Description:** 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. (Pre req: Animal Care)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 2593 NURSING II**

**Description:** 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. (Pre req: Facility Mgt. and Nursing I)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 2652 PARASITOLOGY**

**Description:** Students study 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. (Pre req: Intro to Laboratory Science with at least a 70%)

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTS 2662 HEMATOLOGY**

**Description:** (Pre-req: 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTS 2672 CLINICAL PATHOLOGY**

**Description:** (Pre-req: Hematology with at least a 70%) Students will continue laboratory testing in the areas of hematology (including blood chemistries); parasitology (including skin scraping analysis); bacteriological culturing, isolation and identification; urinalysis and sample submission.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTS 2733 DISEASES OF VET MED**

**Description:** 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. (Pre req: Anatomy and Physiology and Intro to Microbiology)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 2823 RADIOLOGY II**

**Description:** 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. (Pre req: C (70%) or higher grade in Radiology I)

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 2933 ANESTHESIOLOGY**

**Description:** (Pre-req: A grade of 70% or currently enrolled in Radiology II, Nursing II, Pharmacology and Hematology) 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. A 70% or higher in Anesthesiology is a pre-requisite Surgery Prep.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTS 2953 SURGERY PREPARATION**

**Description:** (Pre req: 70% or higher in 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. The lab is an integral portion of this course.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

## Veterinary Technology (VTL)

**VTL 1113 LABORATORY ANIMAL MEDICINE I**

**Description:** Lectures and journal article driven discussions will help students acquire knowledge of topics and skills used by animal research technicians. This course will explore a wide range 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.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**VTL 1122 LABORATORY ANIMAL MEDICINE II**

**Description:** (Pre req: Lab Animal Medicine I) 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.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Format:** LEC

**VTL 1133 LABORATORY ANIMAL MANAGEMENT**

**Description:** 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 (LAT) certification exam.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC



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