



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

Grading Option: Graded

AGR 1073 INVASIVE PLANTS

Description: Invasive plants can be found nearly everywhere on Earth. The flora of our planet is constantly being redistributed by either natural or human forces. The change in locations of plant species has affected, and continues to affect, ecosystems around the world. In this course, students will learn how invasive plants are able to establish in regions outside of their native range. Students will develop an understanding of the importance of invasive plants at the global scale and learn how species, which are fairly being in on ecosystem, can have significant negative impacts in others. The focus will be on how and why invasive plants become established and their impacts on ecosystems.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded

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

Grading Option: Graded

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

Grading Option: Graded

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

Grading Option: Graded

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

Grading Option: Graded

AGR 1204 PRINCIPLES OF SOILS

Description: A study of soil formation and the chemical, physical and biological properties of soils through a combination of lecture and lab learning activities. The course will emphasize soil conditions that affect crop growth. Management strategies to sustain long-term soil health and crop productivity will be covered.

Credit Hours: 4

Max credits per semester: 4

Max credits per degree: 4

Grading Option: Graded

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

Grading Option: Graded

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

Grading Option: Graded

AGR 1603 INTRODUCTION TO URBAN AGRICULTURE

Description: An introduction to the history, definitions, principles, practices, and innovations of agricultural production in urban and pre-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

Grading Option: Graded

AGR 1661 AGRONOMY ORIENTATION

Description: This course will provide students the opportunity to develop their "intercultural knowledge and competence" and "information literacy" skills and abilities. It will also include group activities to help formulate career goals, improve academic success skills, develop a resume and select and appropriate internship.

Credit Hours: 1

Max credits per semester: 1

Max credits per degree: 1

Grading Option: Graded

AGR 1881 APPLIED AGRICULTURAL EXPERIENCE

Description: Instructor permission required for enrollment. The course will provide agricultural experiential learning activities that meet the specific needs of the academic program pursued. Learning experiences will emphasize hand's-on activities in the field or laboratory that reflects the student's chosen career. Experiences will be designed collaboratively between NCTA and any collaborating partners. Credit hours for the experience will be awarded to match the experience and meet requirement designated in the Credit Hour Policy.

Credit Hours: 1-6

Min credits per semester: 1

Max credits per semester: 6

Max credits per degree: 6

Grading Option: Graded

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

Grading Option: Graded

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, Academic Lead, and Advisor)

Credit Hours: 1

Max credits per semester: 1

Max credits per degree: 2

Grading Option: Graded

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

Grading Option: Graded

AGR 2091 CROP PRACTICUM III

Prerequisites: AGR 1591 Crop Practicum II

Description: This is the third of a 3-course sequence that integrates students into the crop production of 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

Grading Option: Graded

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

Grading Option: Graded

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

Grading Option: Graded

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

Grading Option: Pass No Pass

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

Grading Option: Graded

**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

Grading Option: Graded

AGR 2383 IRRIGATION MANAGEMENT

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

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded

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

Grading Option: Graded

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

Grading Option: Graded

AGR 2823 INTRODUCTION TO GLOBAL AGRICULTURE AND NATURAL RESOURCES

Description: Overview of global relationships in agriculture and natural resources that affect Nebraska, the United States, and the world. Emphasis on gaining perspectives of the social, technological, economic, environmental, and political issues impacting the world food system.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded

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

Grading Option: Graded

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 withing 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

Grading Option: Graded

AGR 2982 AGRICULTURAL PRODUCTION SYSTEMS CAPSTONE

Description: (Pre req: 2nd year students only) Capstone is a course that provides a culminating learning experience for the student in their chosen Agricultural Production Systems degree option. Learning experiences will focus on professional growth, career-based problem solving, and interaction with various professionals and organizations that support agricultural careers. Capstone projects will be developed by the student that are tailored to their future profession and may include farm/ranch business plans, entrepreneurship in agriculture, or management of instructor designated issues.

Credit Hours: 2

Max credits per semester: 2

Max credits per degree: 2

Grading Option: Graded

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: 4

Grading Option: Graded