AGRICULTURAL LEADERSHIP EDUCATION & COMMUNICATIONS (ALEC)

ALEC 101 Mechanical Drafting
Description: Develop expertise in the use of drafting equipment, geometric construction, orthographic projections, dimensioning, and the application of American National Standards Institute (ANSI) standards.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 102 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. Open to freshman or sophomores or Agricultural Leadership, Education & Communication degree students or Leadership & Communication minor students or Leadership & Entrepreneurship minor students.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 103 Computer-Aided Drafting
Prerequisites: ALEC 122.
Description: Applying computer commands to create two-dimensional engineering and architectural drawings.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ACE: ACE 2 Communication Competence

ALEC 104 Wood Technology
Description: Fundamental woodworking tools and processes. Hand tool, lathe and machine related projects.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 105 Introduction to Engineering Design (IED)
Prerequisites: This course is the first course in the Project Lead the Way pre-engineering program and requires no prerequisite.
Notes: This is a secondary course training option for pre service teachers in Skilled and Technical Sciences. It is a STEM skill requirement for the 2+2 articulation agreement with various community colleges across the state of Nebraska. By allowing pre-service teachers to complete this course, students can reverse transfer the credit back to the community colleges to enforce rigorous training needs in the STEM field for future STS teachers coming out of the ALEC department.
Description: Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3d modeling software, and use an engineering notebook to document their work.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Format: LAB
Prerequisite for: ALEC 115

ALEC 108 Food in Society
Description: An introduction to the systems required to produce, distribute and sell the food that sustains life. The course provides the opportunity to learn from international experts who specialize in the sources, production, safety, distribution, culture, sale, politics and consumption of food worldwide.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ACE: ACE 6 Social Science

ALEC 109 Industrial Metals and Plastics Materials Processing
Description: Forming, molding, separating, and fabricating of industrial materials.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 115 Principles of Engineering (POE)
Prerequisites: ALEC 105, Introduction To Engineering Design is a prerequisite
Notes: This course is the second foundational course taught in the Project Lead the Way pre-engineering curriculum. Students that complete this course will be certified to teach both foundational courses in any secondary PLTW pre-engineering program across the country. This certification gives UNL STS students in the ALEC department a rigorous STEM skill set. Once the course is completed the credit will be reverse transferred back to the community college to fulfill the STEM skill requirement of the 2+2 articulation agreements established with UNL and the ALEC department.
Description: Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.
Credit Hours: 5
Max credits per semester: 5
Max credits per degree: 5
Format: LAB
ALEC 122 Architectural Drafting
Prerequisites: ALEC 101.
Description: Basic skills in the construction of architectural drawings, plot plans, elevation view, wall and floor sections, and roof construction. Architectural modeling.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 125 Land, Food and People
Description: Analyze and synthesize information about the dynamic relationships of land, food, and people and the impacts of human decisions on renewable and non-renewable resources from a local and global perspective.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 134 Agricultural Leadership, Education and Communication Careers
Description: Explore the career opportunities available in agricultural leadership, education and communication focusing on agribusiness, industry training positions, secondary agriscience instruction, extension education, agricultural and environmental sciences communication, and international agricultural education. Course has guest speakers and field trips.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Format: LEC

ALEC 135 Early Field Experience in Agricultural Leadership, Education and Communication
Prerequisites: Agricultural leadership, education and communication major or permission
Description: An exploration of the history, philosophy, goals, and objectives of career and Technical Education, more specifically, School-Based Agricultural Education. An introduction to lesson plan development, objective/essential question writing, and peer teaching will provide knowledge and skills that will be used in an early field experience. The early field experience will provide a platform for critical reflection that will help mold future agricultural teachers.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 135A Introduction to Skilled and Technical Sciences Education
Description: This is an introduction to basic lesson plan development, objective writing, and teaching in Skilled and Technical Sciences. A 40-hour early field experience in a Skills USA affiliated STS education program is required. The early field experience explores teaching as a potential career.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: FLD

ALEC 136 Fundamentals of Agricultural and Environmental Sciences Communication
Description: Introduction to the study of agricultural and environmental sciences communications. Strategies and techniques for success in the major and college courses generally using a systems thinking approach, fundamental concepts of communicating information related to science, environment, agriculture and natural resources to internal and external audiences, and job shadowing experience to help prepare for careers in the field.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 137 Access to AEC Careers
Description: Access to AEC careers is designed for students interested in the fields of Agricultural and Environmental Sciences. The course will provide an overview of the major career paths in these fields and will introduce students to potential employers and career development resources.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 153 Chancellor's Leadership Class
Prerequisites: Admission to the Chancellor's Leadership Class program
Description: Leadership development. Understanding of self, develop leadership knowledge, and how to make a difference in the community.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 165 Pepsi Service Scholars
Prerequisites: Pepsi Scholarship for Outstanding Leadership and Service recipient
Notes: Requires 2 to 3 hours per week of outside of class time in community service.
Description: Civic and social responsibility through service-learning programming. Introduction to civic life, civic agent, and life-long service.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 189H University Honors Seminar
Prerequisites: Good standing in the University Honors Program or by invitation.
Description: Topic varies.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 200 Writing for Agriculture and Natural Resources
Prerequisites: Major or minor in Agricultural and Environmental Sciences Communication (AESC)
Description: Application of generally accepted practices for students desiring a communications career in agricultural and/or environmental sciences. Associated Press writing style, audience analysis, interviewing skills, writing mechanics, nuances of both verbal and nonverbal communication and professional collaboration.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
ALEC 201 Electricity/Electronics
Description: Introduction to electricity and/or electronics and their applications to industry. AC and DC circuit design, construction, and analysis.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 202 Foundations of Leadership Theory and Practice
Description: Foundational knowledge of leadership theory and its relationship to the practice of leadership. Resolve complex leadership challenges by evaluating the intersection between leader, follower, and context. Critically assess real-world situations and make decisions about what theoretically-based leadership skills and behaviors are most likely to be effective. ALEC 202 will be offered both in face-to-face and online formats during fall and spring semesters and will be offered only online during the summer 8-week session.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: ALEC 422

ALEC 203 Automotive Technology
Description: Automotive technology and the equipment related to automotive repairs. The design, theory, and operations of automotive systems through laboratory activities.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 204 Machine Tool Technology
Description: Basic machine shop practices involving hand and precision measuring tools, bench work, layout, engine lathe, milling machine, surface and pedestal grinders.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 205 Welding Technology
Description: Basic knowledge and skill in both oxygen-acetylene welding and cutting, and electrical arc welding.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 207 Communicating to Public Audiences
Crosslisted with: ADPR 207
Prerequisites: College of Agricultural Sciences and Natural Resources (CASNR): completion of all CASNR core communications course requirements.
Description: Concepts and techniques of public relations. Skills and theory for relating to government, corporate, and other agricultural public audiences.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: ADPR 429; ADPR 439

ALEC 234 Planning Leadership and Experience Programs
Prerequisites: Sophomore standing and ALEC 134 and/or 135.
Description: Theory of experiential education to middle school and secondary agricultural education programs, especially leadership and career education. Development of Supervised Agricultural Experiences (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.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 235 STS Technical Skills and Skills USA
Description: Theory of experiential education to middle school and secondary Skilled and Technical Sciences education programs, especially leadership and career education. Exposure to Supervised Career and Technical Student Organization Experience (CTSO), Skills USA, appropriate to the community, school, and student needs recording using electronic technology in learning how to teach Skilled and Technical Science courses supported by Skills USA. This course will provide the work based learning credit (006.34D3) for the Industrial Technology Education Field Endorsement, and STS Supplemental endorsements. This course includes 20 hours of SkillsUSA field experience.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Groups: Introductory

ALEC 240 Digital Photography and Visual Communication for Agriculture and the Environment
Prerequisites: Students must be an AESC major or minor. Otherwise, instructor permission is required.
Description: Digital photography theory and tools to deliver science-based agricultural and environmental information for diverse audiences. Develop an understanding of and apply digital photography concepts such as composition, lighting, landscape, portrait, and editing in the development of a final photo essay project for a real-world audience.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 241 Mobile Video Production of Agricultural and Environmental Issues
Prerequisites: AESC major or minor. Otherwise, instructor permission required.
Notes: This is a blended learning course. We will meet face-to-face once a week to develop our projects. We will also participate in weekly online activities such as readings, discussion boards, wikis, etc.
Description: Use mobile devices to research agricultural and environmental science topics, conduct and record video interviews with scientists about controversial scientific topics, record footage in science labs and field sites, and produce final videos for real-world audiences. Gain experience with digital storytelling theory and techniques.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
ALEC 242 Construction Technology  
**Prerequisites:** ALEC 104.  
**Description:** Classifications, properties, and uses of common construction materials and building practices. Construction of a residential dwelling from plot plan through trim and finish work.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 243 Fine Woodworking  
**Prerequisites:** ALEC 104.  
**Description:** Woodworking special processes. Furniture design, frame and panel construction, veneering and steam bending. Project design and construction on an individual project serve as the final assessment.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 246 Modern Industries  
**Prerequisites:** ALEC 204.  
**Description:** CNC (Computer Numerical Control) programming for tool making to include milling, computer aided manufacturing and/or drafting and/or design and electrical discharge machines.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 302 Dynamics of Effective Leadership in Organizations  
**Prerequisites:** Open to sophomores or above.  
**Description:** Principle and process of effective leadership in complex organizations of society and commerce. Dynamic interactions of personal characteristics, technical skills, interpersonal influence, commitment, goals and power.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 303 Energy, Power and Transportation Technology  
**Prerequisites:** ALEC 101, 109, 203, 204, and 205.  
**Notes:** ALEC 303 is a synthesis of skill-based courses for Industrial Technology Education (ITE) majors.  
**Description:** Design, construct, and test a one-person electric vehicle. Enter the vehicle in a statewide competition.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 305 Presentation Strategies for Agricultural Audiences  
**Prerequisites:** JGEN 200 or 300.  
**Description:** Presentation strategies used in agribusiness, education, government and public service. Attention to audience need, organization, methodology and management of presentation resource, especially electronic technology.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 308 Laboratory Instruction and Management  
**Prerequisites:** 6 hrs mechanized systems management; advanced standing  
**Notes:** Student demonstrations and presentations required.  
**Description:** Planning, conducting, and administering the instructional programs related to experientially based education in school laboratory settings. Variety of laboratory settings, including agricultural mechanics, greenhouse, soils, etc.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 330 Foundations of Cooperative Extension  
**Prerequisites:** Junior standing.  
**Description:** Cooperative Extension in a variety of settings and its role in the land-grant mission. Processes for developing and conducting need-driven, research-based, extension programs. Relationships with public and private agencies. Strategies for volunteerism.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 331 Supervised Field Experiences  
**Prerequisites:** Junior or senior by application.  
**Description:** Field course of supervised observation and participation with various phases of agricultural education and/or agribusiness.  
**Credit Hours:** 2-5  
**Min credits per semester:** 2  
**Max credits per semester:** 5  
**Max credits per degree:** 10  
**Format:** FLD

ALEC 337 Instructional Internship in Leadership Development  
**Prerequisites:** Permission.  
**Description:** A structured professional and personal development experience. Small group facilitation and instructional assistance in leadership development courses.  
**Credit Hours:** 1-3  
**Min credits per semester:** 1  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** FLD

ALEC 340 Advanced Machine Woodworking  
**Prerequisites:** ALEC 243  
**Notes:** ALEC 340 is a continuation of ALEC 243.  
**Description:** Machine woodworking on a major individual project. Wood finishing and maintenance of hand and power tools.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC
ALEC 341 Podcasting to Increase Science Literacy
Prerequisites: AESC majors and minors. Otherwise, instructor permission is required.
Notes: This is a blended learning course. We will meet face-to-face once a week to develop our projects. We will also participate in weekly online activities such as readings, discussion boards, wikis, etc.
Description: Analysis and research of science literacy concepts, how to engage in public conversations about controversial issues, how to interview scientists, how to edit scientific audio interviews, and how to ultimately produce a podcast series with the goal of increasing the public’s science literacy. Offered in the spring semester of odd years.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 346 Advanced Computer Aided Drafting and Design
Prerequisites: ALEC 101 or 103.
Description: Introduction to 3D modeling using sketching and Inventor software.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 350 Agriculture, the Environment & Science in the Media
Prerequisites: Completion of ACE 1 and ACE 2 coursework
Notes: Recommended for junior level students and above.
Description: How agriculture, the environment, and science are covered in media by news media outlets. Use of framing theory as a foundation to understand why messages are crafted in certain ways, how and why news media portray topics and issues using certain metaphors and story lines. Creation of effective media messages related to topics using framing, how to handle and respond to media requests, and interact with members of the media.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 388 Ethics in Agriculture and Natural Resources
Crosslisted with: AECN 388
Description: Ethics focusing on agricultural and natural resource issues. Using case studies from the professional workplace and contemporary society, develops intellectual skills necessary to reflect critically on ethical issues and apply appropriate conceptual tools for resolution of issues arising from conflicting ethical and value systems.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
ACE: ACE 8 Civic/Ethics/Stewardship

ALEC 390 Industrial Experience
Prerequisites: Permission.
Description: Occupational experience or supervised occupational experience in conjunction with directed observation.
Credit Hours: 1-6
Min credits per semester: 1
Max credits per semester: 6
Max credits per degree: 6
Format: FLD

ALEC 393 Digital Imaging and Storytelling in Agriculture and Natural Resources
Crosslisted with: NRES 393
Prerequisites: Consent of instructor(s). One college level course in photography or equivalent, and knowledge of the basics of shooting still photographs or video using digital cameras. Open only to College of Agricultural Sciences and Natural Resources students.
Notes: Can be repeated for a maximum of 9 credit hours by consent of instructor.
Description: Concepts and techniques related to use of remote and automated digital camera technology to capture images in agriculture and natural resources contexts to communicate a narrative/story. Completion of individual project using a variety of technologies including camera traps, time-lapse camera systems, remote triggered cameras, as well as traditional audio and video and conventional photography.
Credit Hours: 1-9
Min credits per semester: 1
Max credits per semester: 9
Max credits per degree: 9
Format: LAB

ALEC 397 Special Topics
Prerequisites: Permission.
Description: Readings; in depth discussions; analysis of current theory, issues, problems, research and practice in leadership, education and/or communication. Topics vary.
Credit Hours: 1-3
Min credits per semester: 1
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

ALEC 399 Independent Study in Communications
Prerequisites: Permission and advance approval of plan of work.
Description: Individual or group projects in research, literature review, or extension of course work under supervision and evaluation of a departmental faculty member.
Credit Hours: 1-3
Min credits per semester: 1
Max credits per semester: 3
Max credits per degree: 12
Format: IND

ALEC 400 Overview to Program Planning
Crosslisted with: ALEC 800
Prerequisites: ALEC 305 or ALEC/TEAC 805/NUTR 806.
Notes: ALEC 400/800 is designed for individuals interested in developing and/or improving program planning skills.
Description: Theoretical and applied considerations for identifying content, design, implementation, and evaluation of educational programs that vary in length from several hours to several months.
Credit Hours: 3
Min credits per semester: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
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<tr>
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<tbody>
<tr>
<td>ALEC 405</td>
<td>Methods of Instruction for Secondary Agriscience Education</td>
<td>Senior standing and 3 hrs educational psychology, or permission</td>
<td>Instructional delivery of a secondary agricultural education program in the public school system. Organizing instructional content, individual lesson planning, methods of formal instructional delivery, student behavior management, instructing the handicapped and disadvantaged, and student testing. Considerable time is spent on undergraduates demonstrating instructional delivery.</td>
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</tr>
</tbody>
</table>

**ALEC 405L Methods of Instruction Laboratory Education**  
**Prerequisites:** Admission to the teaching program in agricultural education and parallel registration in ALEC 405.  
**Description:** Laboratory exercises that complement material covered in ALEC 405. Involve practice teaching at either the middle or secondary school level.  
**Credit Hours:** 1  
Max credits per semester: 1  
Max credits per degree: 1  
**Format:** LAB

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<tbody>
<tr>
<td>ALEC 407</td>
<td>Supervisory Leadership</td>
<td>Junior Standing</td>
<td>Knowledge and theoretical basis for practicing supervisors in a changing workplace where supervisors have increasing responsibilities due to the flattening or organizational structures, solving supervisory challenges in organizing and planning, problem solving and decision making, performance appraisal and leading a diverse workforce.</td>
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</tbody>
</table>

**ALEC 407 Supervisory Leadership**  
**Crosslisted with:** ALEC 807, CYAF 807  
**Prerequisites:** ALEC 302.  
**Description:** Knowledge and theoretical basis for practicing supervisors in a changing workplace where supervisors have increasing responsibilities due to the flattening or organizational structures, solving supervisory challenges in organizing and planning, problem solving and decision making, performance appraisal and leading a diverse workforce.  
**Credit Hours:** 3  
Max credits per semester: 3  
Max credits per degree: 3  
**Format:** LEC

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<tr>
<td>ALEC 410</td>
<td>Environmental Leadership</td>
<td>Junior Standing</td>
<td>Major leaders in conservation and ecology that emphasizes agricultural and cultural issues and relationships with the environment.</td>
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</tbody>
</table>

**ALEC 410 Environmental Leadership**  
**Crosslisted with:** ALEC B10, NRES 413, NRES 813  
**Prerequisites:** Junior Standing  
**Notes:** Offered on the World Wide Web (WWW) fall semester of odd-numbered years and in the classroom fall semester of even numbered-years.  
**Description:** Major leaders in conservation and ecology that emphasizes agricultural and cultural issues and relationships with the environment.  
**Credit Hours:** 3  
Max credits per semester: 3  
Max credits per degree: 3  
**Format:** LEC

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<tbody>
<tr>
<td>ALEC 412</td>
<td>Multimedia Applications for Education and Training</td>
<td>Junior standing and acceptance into the student teaching program in agricultural education</td>
<td>Designing new instructional programs, expanding the impact of student behavioral objectives, and evaluating the total instructional program.</td>
<td>3</td>
</tr>
</tbody>
</table>

**ALEC 412 Multimedia Applications for Education and Training**  
**Crosslisted with:** ALEC 812, NUTR 812  
**Description:** Designing new instructional programs, expanding the impact of student behavioral objectives, and evaluating the total instructional program.  
**Credit Hours:** 3  
Max credits per semester: 3  
Max credits per degree: 3  
**Format:** LEC

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<tr>
<td>ALEC 413</td>
<td>Program Development</td>
<td>Junior standing</td>
<td>Leadership theory in an applied context. Leadership analyzed through a variety of genres: autobiography, drama, fiction, tracts and treatises, speeches.</td>
<td>3</td>
</tr>
</tbody>
</table>

**ALEC 413 Program Development**  
**Prerequisites:** Junior standing. College of Journalism and Mass Communications: Junior standing; ADPR 283.  
**Description:** Fundamental components of issues management and crisis communications. Learning experiences in agriculture and natural resources that provide an understanding of issues facing the respective field of study.  
**Credit Hours:** 3  
Max credits per semester: 3  
Max credits per degree: 3  
**Format:** LEC  
**Prerequisite for:** ASCI 381

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<tr>
<td>ALEC 414</td>
<td>Classic Figures in Leadership</td>
<td>Junior standing</td>
<td>Leadership theory in an applied context. Leadership analyzed through a variety of genres: autobiography, drama, fiction, tracts and treatises, speeches.</td>
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</tbody>
</table>

**ALEC 414 Classic Figures in Leadership**  
**Crosslisted with:** ALEC 814  
**Prerequisites:** Junior standing.  
**Description:** Leadership theory in an applied context. Leadership analyzed through a variety of genres: autobiography, drama, fiction, tracts and treatises, speeches.  
**Credit Hours:** 3  
Max credits per semester: 3  
Max credits per degree: 3  
**Format:** LEC

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<tr>
<td>ALEC 420</td>
<td>Improvement of Instructional Programs for Post-High-School Occupational Education</td>
<td>Junior standing. Major or minor in Agricultural and Environmental Sciences Communication. Students in the minor must have completed a minimum of 12 credits of minor coursework to enroll.</td>
<td>Designing new instructional programs, expanding the impact of student behavioral objectives, and evaluating the total instructional program.</td>
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</tbody>
</table>

**ALEC 420 Improvement of Instructional Programs for Post-High-School Occupational Education**  
**Crosslisted with:** ALEC 820  
**Description:** Designing new instructional programs, expanding the impact of student behavioral objectives, and evaluating the total instructional program.  
**Credit Hours:** 1-3  
Min credits per semester: 1  
Max credits per semester: 3  
Max credits per degree: 3  
**Format:** LEC

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<tr>
<td>ALEC 421</td>
<td>Agricultural &amp; Environmental Sciences Communication Practicum</td>
<td>Junior status. Major or minor in Agricultural and Environmental Sciences Communication. Students in the minor must have completed a minimum of 12 credits of minor coursework to enroll.</td>
<td>This is a project course for students enrolled in the Agricultural and Environmental Communications program. It provides students the opportunity to develop, plan, and execute a project of their own design to showcase skills and knowledge gained through coursework. Students are guided by course instructor(s) and collaborate with additional identified faculty with appropriate expertise in agricultural sciences and natural resources.</td>
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**ALEC 421 Agricultural & Environmental Sciences Communication Practicum**  
**Prerequisites:** Junior status. Major or minor in Agricultural and Environmental Sciences Communication. Students in the minor must have completed a minimum of 12 credits of minor coursework to enroll.  
**Description:** This is a project course for students enrolled in the Agricultural and Environmental Communications program. It provides students the opportunity to develop, plan, and execute a project of their own design to showcase skills and knowledge gained through coursework. Students are guided by course instructor(s) and collaborate with additional identified faculty with appropriate expertise in agricultural sciences and natural resources.  
**Credit Hours:** 3  
Max credits per semester: 3  
Max credits per degree: 3  
**Format:** LEC
ALEC 422 Facilitation and Project Planning
**Prerequisites:** ALEC 202 or equivalent and at least junior standing or permission.
**Notes:** The course will require travel to project sites, which are within 75 miles of Lincoln. At least 5 project visits are required, and more project visits may be required depending on the project. Generally, students work in pairs, so not all students need to be able to drive, and the instructor will try to create partnerships that facilitate traveling needs. However, if students cannot find transportation to a project site, they will not be able to complete the course.
**Description:** Foundational knowledge of project planning and facilitation. An experiential opportunity to facilitate a project within a community.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC

ALEC 424 Foundation of Career and Technical Education
**Crosslisted with:** ALEC 824
**Description:** Scope and structure of career and technical education within the educational system. Teacher's role and responsibilities in dealing with legislative mandates in planning, management, and evaluation of a local program.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC

ALEC 428 Leadership in Public Organizations
**Crosslisted with:** ALEC 828, NRES 428, NRES 828
**Prerequisites:** Junior standing
**Description:** Leadership in theories, research, and practices in public organizations and natural resource agencies.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC

ALEC 431 Student Teaching
**Prerequisites:** 3 hrs EDPS; passing score on the Preprofessional Skills Tests (PPST); and permission
**Notes:** Capstone course. Placement arranged by the department. Student teaching placement arranged by the department. Seven to sixteen weeks of off-campus student teaching. Pass/no pass only.
**Description:** Guided participation in various phases of a public school agricultural education program.
**Credit Hours:** 1-12
**Min credits per semester:** 1
**Max credits per semester:** 12
**Max credits per degree:** 12
**Format:** FLD
**ACE:** ACE 10 Integrated Product

ALEC 433 Dynamics of Effective Leadership in Groups & Teams
**Crosslisted with:** ALEC 833
**Prerequisites:** At least Junior standing or permission
**Description:** This course will cover the foundational knowledge of team and group dynamics theory and its relationship to the practice of leadership in organizations and communities. Development of leadership, followership, and teamwork skills in small groups and teams. Focus on team and group decision making, problem solving, and creativity, peer assessment, and evaluation using real-world situations and contexts. Critically apply team and group dynamic theories and research to leadership in organizations and communities.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC

ALEC 444 Science Writing
**Crosslisted with:** JOMC 444, JOMC 844
**Prerequisites:** Permission
**Notes:** Open to all majors. Articles may be submitted for publication.
**Description:** Advanced writing about science for the non-expert and/or for the general public. Issues in science communication through reading the best writers in science and journalism. Research and write short articles and longer profiles about science and scientists at the University of Nebraska-Lincoln (UNL) and elsewhere. Polish writing skills for doing work in science classes.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC

ALEC 466 Leadership and Diversity in Organizations and Communities
**Crosslisted with:** ALEC 866
**Prerequisites:** Junior standing.
**Description:** Leadership theories and their applications to human diversity in organizations and communities.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC

ALEC 477 Leadership and Motivation
**Crosslisted with:** ALEC 877
**Description:** Classic and contemporary motivation theories applied to leadership in organizations and communities.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC
ALEC 480 Capstone Experience in Agricultural and Environmental Sciences Communication  
**Prerequisites:** Consent of Instructor. Senior standing.  
**Notes:** Requires interviews outside of class time.  
**Description:** Investigate topics identified by IANR as critical to Nebraska agriculture and research, conduct interviews, write, edit, design and assist in the production of print and multimedia versions of the Strategic Discussions for Nebraska publication. Emphasis on factual, complete, accurate and clear communication of complex scientific and sociologically important issues in Nebraska agriculture. Learning to communicate research and science-based agricultural concepts to public audiences.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC  
**ACE:** ACE 10 Integrated Product

ALEC 488 Leadership, Power and Influence  
**Crosslisted with:** ALEC 888  
**Description:** Organizational influence processes, power, and politics in organizations and communities.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 494 Undergraduate Seminar in Agricultural Education  
**Description:** Philosophy and relationship of agricultural education in the public schools. Development and coordination of adult and continuing agricultural education programs.  
**Credit Hours:** 1-3  
**Min credits per semester:** 1  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

ALEC 495A Internship in Leadership Development  
**Prerequisites:** Junior standing; ALEC 302; Agricultural Education major; and permission.  
**Notes:** Agricultural Education majors must take ALEC 495A for 'Pass/No Pass'. Capstone course.  
**Description:** Internship in a selected agribusiness, industry, or agency. Collaboration development of a training program and leadership activities.  
**Credit Hours:** 3-6  
**Min credits per semester:** 3  
**Max credits per semester:** 6  
**Max credits per degree:** 6  
**Format:** FLD  
**ACE:** ACE 10 Integrated Product

ALEC 495B Internship in Agricultural and Environmental Sciences Communication  
**Prerequisites:** Junior standing; Agricultural and Environmental Sciences Communication major; and permission  
**Notes:** ALEC 495B is taken the second semester of the junior year or in the summer following the junior year. Department approval is required. ALEC 495B cannot be taken Pass/No Pass.  
**Description:** Internship experience with an organization selected by student and approved by instructor in an agricultural or environmental sciences organization where the focus of the internship is related broadly to communications.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** FLD

ALEC 496 Independent Study in Leadership Education  
**Crosslisted with:** ALEC 896  
**Prerequisites:** Permission.  
**Description:** Projects to research, literature review, or extension of course work.  
**Credit Hours:** 1-9  
**Min credits per semester:** 1  
**Max credits per semester:** 9  
**Max credits per degree:** 9  
**Format:** IND

ALEC 499H Honors Thesis  
**Prerequisites:** Admission to the University Honors Program and permission, AGRI 299H recommended.  
**Description:** Conduct a scholarly research project and write a University Honors Program or undergraduate thesis.  
**Credit Hours:** 3-6  
**Min credits per semester:** 3  
**Max credits per semester:** 6  
**Max credits per degree:** 6  
**Format:** IND