The Department of Agricultural Leadership, Education, and Communications (ALEC) includes a student-centered faculty and staff offering undergraduate and graduate degrees leading to professional careers. Undergraduate programs in ALEC offer a unique combination of practical, hands-on skills and the critical people skills required for success in today's fast-moving careers. ALEC graduates are uniquely equipped for leadership, education, communications, and training roles in the broad field of agricultural sciences and human performance in both domestic and international settings. ALEC offers four Bachelor of Science degrees: Agricultural Communications and Journalism, Agricultural Leadership and Development, Agricultural Science, and University Studies-Leadership Studies; and three minors: Agricultural Communications and Journalism, International Agricultural Development, and Leadership.

Faculty

Archer, Holli R, Assistant Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 2013

Boyd, Barry L, Associate Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 1991

Briers, Gary E, Professor
Ag Leadership, Educ & Comm
PHD, Iowa State University, 1978

Dooley, Kim E, Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 1995

Dunsford, Deborah W, Senior Lecturer
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 1993

Edney, Kirk C, Instructional Associate Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 2009

Elbert, Chanda D, Associate Professor
Ag Leadership, Educ & Comm
PHD, The Pennsylvania State University, 2000

Elliot, John F, Professor
Ag Leadership, Educ & Comm
PHD, Ohio State University, 1988

Felton Odom, Summer R, Associate Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 2011

Hanagriff, Roger D, Instructional Associate Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 2002

Hancock, Jay P, Assistant Lecturer
Ag Leadership, Educ & Comm
MS, Texas A&M University, 1984

Harlin, Julie F, Associate Professor
Ag Leadership, Educ & Comm
PHD, Oklahoma State University, 1999

Lockett, Landry L, Assistant Lecturer
Ag Leadership, Educ & Comm
EDD, Texas A&M University, 2007

Martin, Hannah M, Assistant Lecturer
Ag Leadership, Educ & Comm
MS, Murray State University, 2014

McGrath, Paul A, Assistant Lecturer
Ag Leadership, Educ & Comm
PHD, Marist College, 2012

McKim, Billy R, Associate Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 2010

Moore, Lori L, Associate Professor
Ag Leadership, Educ & Comm
PHD, University of Florida, 2003

Murphrey, Theresa P, Associate Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 1997

Murphy, Timothy H, Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 1995

Pina Jr, Manuel, Associate Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 1978

Preston, Tammie M, Assistant Lecturer
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 2014

Redwine, Tobin D, Assistant Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 2014

Rutherford, Tracy A, Professor
Ag Leadership, Educ & Comm
PHD, Texas A&M University, 1998

Strong Jr, Robert L, Associate Professor
Ag Leadership, Educ & Comm
PHD, University of Florida, 2010

Strong, Jennifer R, Associate Professor
Ag Leadership, Educ & Comm
PHD, Oklahoma State University, 2007
Department of Agricultural Leadership, Education, and Communications

Walther, David R, Assistant Lecturer
Ag Leadership, Educ & Comm
MS, Texas A&M University, 2011

Wegener, Robert P, Assistant Lecturer
Ag Leadership, Educ & Comm
MS, Oklahoma State University, 1975

Wingenbach, Gary J, Professor
Ag Leadership, Educ & Comm
PHD, Iowa State University, 1995

Majors

- Bachelor of Science in Agricultural Communications and Journalism (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-leadership-education-communications/journalism-bs)
- Bachelor of Science in Agricultural Leadership and Development (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-leadership-education-communications/leadership-development-bs)
- Bachelor of Science in Agricultural Science (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-leadership-education-communications/agricultural-science-teaching-bs)
- Bachelor of Science in University Studies, Leadership Studies Concentration (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-leadership-education-communications/leadership-studies-university-studies-bs)

Minors

- Agricultural Communications and Journalism Minor (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-leadership-education-communications/journalism-minor)
- International Agricultural Development Minor (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-leadership-education-communications/international-agricultural-development-minor)
- Leadership Minor (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-leadership-education-communications/leadership-minor)

Courses

- Agricultural Communication and Journalism (AGCJ) (p. 2)
- Agricultural Leadership, Education and Communication (ALEC) (p. 4)
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- Agricultural Science (AGSC) (p. 7)

Agricultural Communication and Journalism

AGCJ 105 Introduction to Agricultural Communications
Credits 3. 3 Lecture Hours.
Introduction to mass communication, its history, role in society, and especially its unique role in agriculture; importance of mass communication and the communication methods used in modern society; foundation for an understanding of agricultural news and information. Only one of the following will satisfy the requirements for a degree: AGCJ 105 and JOUR 102.

AGCJ 281 Journalism Concepts for Agriculture
Credits 3. 3 Lecture Hours.
The role of the news media in covering government, the court systems, corporations, taxation, and insurance; a practical perspective on how journalists interact with public and private institutions from a legal, ethical and social standpoint.
Prerequisite: Grade of C or better in AGCJ 105 or concurrent enrollment.

AGCJ 285 Directed Studies
Credits 1 to 4. 1 to 4 Other Hours.
Directed study of selected issue in field of agricultural communications with emphasis on collection, synthesis and interpretation of information.
Prerequisite: Approval of department advisor.

AGCJ 289 Special Topics in...
Credits 1 to 4. 1 to 4 Lecture Hours.
Special topics in an identified area of agricultural development. May be repeated for credit.
Prerequisite: Approval of department advisor.

AGCJ 291 Research
Credits 1 to 4. 1 to 4 Other Hours.
Research conducted under the direction of faculty member in agricultural communications and journalism. May be repeated 2 times for credit.
Prerequisites: Freshman or sophomore classification and approval of department advisor.

AGCJ 305 Theory and Practice of Agricultural Publishing
Credits 3. 3 Lecture Hours.
Audience identification, publication content, management and design; analyze existing agricultural publications, identify audiences, advertising base and content.
Prerequisites: AGCJ 105; junior or senior classification.

AGCJ 306 Theory and Practice of Agricultural Public Relations
Credits 3. 3 Lecture Hours.
Public relations between agricultural producers and their suppliers as a critical part of agricultural communication; public relations objectives, strategies, tactics, evaluation and execution theory and practice examined. Only one of the following will satisfy the requirements for a degree: AGCJ 306 and JOUR 324.
Prerequisites: Grade of C or better in AGCJ 105; junior or senior classification.

AGCJ 307 Design for Agricultural Media
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Principles and practices of agricultural media design, including design and production of printed publications and graphics; computer assisted design and production of media pieces. Required for AGCJ majors and minors.
Prerequisite: Junior or senior classification.
AGCJ 308 Agricultural Photography
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Develop knowledge of photography, editing software, and composition techniques used in the agricultural communications field; develop photography and photo editing skills to a satisfactory level as demonstrated by performance on assignments and exams.
Prerequisite: Junior or senior classification.

AGCJ 312 Editing for Agricultural Audiences
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Principles and practices of editing for agricultural and technical audiences including improving and tightening copy; writing headlines, titles, and subheads; photo editing and captions, graphics and layout; print, broadcast, interactive and other media.
Prerequisites: AGCJ 105; junior or senior classification.

AGCJ 313 Agricultural Media Writing I
Credits 3. 2 Lecture Hours. 2 Lab Hours.
News gathering, writing, editing and ethics for current and emerging mediums used in agricultural communication; includes news identification, basic news writing methods, introduction to public relations, broadcast and Internet writing, interviewing skills, proper use of direct quotes and other news style. Only one of the following will satisfy the requirements for a degree: AGCJ 312 and JOUR 203.
Prerequisite: Grade of C or better in AGCJ 105 and AGCJ 312.

AGCJ 314 Agricultural Media Writing II
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Interpretative agricultural news gathering and writing for all media types; basic media law and ethics, interviewing skills with assigned practice writing about agriculture, and science and technology, including meeting and event coverage both on and off campus; print, broadcast, interactive and other media.
Prerequisites: Grade of C or better in AGCJ 312 and AGCJ 313; junior or senior classification.

AGCJ 366 Radio Broadcasting
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Survey of American broadcasting, development, and impact; influence on society, basic principles, mass communication theory, station operating programming, advertising, rating services, regulation, and censorship; in-depth analysis of current issues and developments.
Prerequisite: Junior or senior classification.

AGCJ 380 Workshop in Agricultural Communications and Journalism
Credits 1 to 4. 1 to 4 Lecture Hours.
The study, understanding and solution of human-agricultural problems based on theory learned in the classroom, library, laboratory and fieldwork completed by individuals and teams.
Prerequisite: Junior or senior classification.

AGCJ 404 Communicating Agricultural Information to the Public
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Use of agricultural journalism principles and techniques to communicate scientific information related to agriculture, agribusiness, natural resources and life sciences to the general public; communication processes include audience identification, writing, editing and production of agricultural science-based manuscripts for popular and refereed publications.
Prerequisite: Junior or senior classification.

AGCJ 405 Agricultural Publications Production
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Study and practice of the principles and concepts of designing, writing, editing, producing and distributing the AgriLeader magazine and Web site; includes practical applications of writing feature articles, magazine and Web site design, advertising sales, layout and graphics. May be repeated one time for credit.
Prerequisites: Grade of C or better in AGCJ 312; junior or senior classification.

AGCJ 406 Agricultural Public Relations Methods
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Agricultural public relations campaign analysis; public relations case studies and methods including writing public relations plans for agricultural entities, producing public relations components and evaluating public relations objectives, strategies and tactics.
Prerequisites: Junior or senior classification.

AGCJ 407 Web Authoring in Agricultural Communication
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Study and practice of basic website design theories, principles and writing for the web; use of web authoring software (not a programming class) to create online publications tailored for agricultural audiences; emphasizes informative content and functional design.
Prerequisites: Grade of C or better in AGCJ 307; junior or senior classification.

AGCJ 408 Advertising Copy and Design
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Creative aspects of advertising strategy, copywriting, typography and design in a variety of visual media; learn to make and evaluate advertising.
Prerequisites: Grade of C or better in AGCJ 307 and AGCJ 313; junior or senior classification; approval of instructor.

AGCJ 409 Television Production for Agricultural Journalists
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Fundamental concepts required to develop a broadcast quality video production; uses the high definition facilities of KAMU-TV and TTVN; hands-on experience in video production including producing, shooting and hosting a professional program series broadcast on KAMU-TV.
Prerequisite: Junior or senior classification.

AGCJ 411 Audience and Communications Research Methods
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Evaluation and implementation of research designs and methods used in audience and communications research; data collection methods and strategies, including interviews, observations, focus groups, surveys and content analyses, use of descriptive and comparative analyses to develop data-driven personas and recommendations for engaging target audiences.
Prerequisite: Junior or senior classification.

AGCJ 413 Emerging Media in Agriculture
Credits 3. 3 Lecture Hours.
Popular emerging media in agriculture to communicate, build and market a brand online; understanding the strategy behind the posts and other communications; create emerging media communications strategies for academic or business entities that may be implemented upon completion of course.
Prerequisite: Grade of C or better in AGCJ 313.
AGCJ 466 Advanced Radio Broadcasting
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Project-based instruction; a practical guide to producing, presenting, programming and managing a radio station. May be taken four times for credit.
Prerequisites: AGCJ 366; junior or senior classification or approval of instructor.

AGCJ 481 Senior Seminar
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Identification of communication-related issues; strategic planning to meet goals; measurable communication outcomes; writing, designing, creating and distributing communications products to clients; measuring effectiveness; working in teams.
Prerequisites: Grade of C or better in AGCJ 313; senior classification.

AGCJ 485 Directed Studies
Credits 1 to 4. 1 to 4 Lecture Hours.
Directed individual study of selected problems in agricultural communications, communication methods and the communication profession with emphasis on collection, analysis and presentation of information.
Prerequisites: Junior or senior classification; approval of department advisor.

AGCJ 489 Special Topics in...
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.
Special topics in an identified area of agricultural communications and journalism. May be repeated for credit.
Prerequisite: Junior or senior classification.

AGCJ 491 Research
Credits 1 to 4. 1 to 4 Other Hours.
Research conducted under the direction of faculty member in agricultural communications and journalism. May be taken three times for credit.
Prerequisite: Approval of department advisor.

AGCJ 499 Directed Studies
Credits 1 to 4. 1 to 4 Other Hours.
Directed study of selected issue in field of agricultural leadership, education, and communications with emphasis on collection, synthesis and interpretation of information. May be taken four times for credit.
Prerequisite: Approval of department advisor.

ALEC 289 Special Topics in...
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.
Special topics in an identified area of agricultural development. May be repeated for credit.
Prerequisite: Approval of department advisor.

ALEC 291 Research
Credits 1 to 4. 1 to 4 Lecture Hours.
Research conducted under the direction of faculty member in agricultural communications and journalism. May be taken two times for credit.
Prerequisites: Freshman or sophomore classification and approval of department advisor.

ALEC 350 Global Agricultural Issues
Credits 3. 3 Lecture Hours.
Review of global agricultural issues (products, environment, people, and culture) affecting international agricultural development; concepts and principles underlying the processes of teaching, research, and service opportunities in international agricultural development and education situations.
Prerequisites: Junior or senior classification or approval of instructor.

ALEC 380 Workshop in Agricultural Leadership, Education, and Communications
Credits 1 to 4. 1 to 4 Lecture Hours.
The study, understanding and solution of human-agricultural problems based on theory learned in the classroom, library, laboratory and fieldwork completed by individuals and teams. May be taken three times for credit.
Prerequisite: Junior or senior classification.

ALEC 399 High-Impact Experience
Credits 0. 0 Lecture Hours.
Participation in an approved high-impact learning practice; documentation and self-assessment of learning experience.
Prerequisites: Junior or senior classification; approval of instructor.

ALEC 412 Technology-Enhanced Instructional Design Strategies for Agriculture
Credits 3. 3 Lecture Hours.
Techniques and applications of technology to enhance instruction of agricultural topics; instructional design principles, instructional strategies, technological tools; the design, development and delivery of technology-enhanced instruction for agriculture and the life sciences. Not intended for majors in education.
Prerequisite: Junior or senior classification.

ALEC 425 Principles of Program Evaluation
Credits 3. 3 Lecture Hours.
Evaluation principles applied to educational programs in agriculture and life science; basic understanding of skills in program evaluation processes, concepts, and theories; develop expertise needed to design and conduct evaluations of youth and adults in extension, community, and school-based programs.
Prerequisite: Junior or senior classification.
ALEC 450 Global Social Justice Issues in Agriculture
Credits 3. 3 Lecture Hours.
An in-depth evaluation of global social justice issues and leadership skills necessary to effectively solve and manage issues in agricultural development; topics include awareness, knowledge and understanding of teaching, research and service opportunities for those seeking careers in global social justice and agricultural leadership.
Prerequisite: Junior or senior classification or approval of instructor.

ALEC 460 Applying International Development Theories in Agriculture
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Practical application of agricultural development theories (geographical, communal, societal, etc.) in real-world settings; high-impact learning, research skill development, international travel or participation in a service-learning project with an international organization.
Prerequisites: Junior or senior classification or approval of instructor.

ALEC 485 Directed Studies
Credits 0 to 4. 0 to 4 Other Hours.
Directed individual study of selected problems in international agriculture leadership, education and communications.
Prerequisites: Junior or senior classification; approval of department advisor.

ALEC 489 Special Topics in...
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.
Prerequisite: Junior or senior classification.

ALEC 491 Research
Credits 1 to 4. 1 to 4 Lecture Hours.
Research conducted under the direction of faculty member in international agricultural leadership, education, and communications.
Prerequisites: Junior or senior classification; approval of department advisor.

ALEC 494 Internship
Credits 1 to 6. 1 to 6 Other Hours.
Supervised internship and independent study related to the student’s professional interest. May be taken six times for credit.
Prerequisites: Junior or senior classification; approval of department advisor.

Agricultural Leadership and Development

ALED 125 Leadership Learning Community I
Credit 1. 1 Lecture Hour.
Offered to students living in the Freshmen Leadership Living Learning Community; fundamentals of developing personal leadership while participating in co-curricular activities; emphasis on the relational model of leadership and global perspective building.
Prerequisite: Freshman classification or approval of instructor; on-campus residence.

ALED 202 Introduction to Leadership
Credits 3. 3 Lecture Hours.
Introduction to the academic and scholarly development of leadership theory and leadership models; investigation of leadership theory when applied to a specific context; development of a leadership definition as an inquiry investigation.

ALED 222 Practicing Diverse Leadership and Cultural Exploration
Credits 3. 3 Lecture Hours.
Social theories and historical perspectives of leadership, particularly in terms of class, gender, race, ethnicity, and nationality; multidisciplinary approach to the study of leadership with a special emphasis on culture completed through readings, class lectures, films, group projects and discussions.
Prerequisite: Membership in the Multicultural Services Culture Leadership, Understanding and Exploration for Sophomores Learning Community.

ALED 225 Leadership Learning Community II
Credit 1. 1 Lecture Hour.
Offered to students living in the Freshmen Leadership Living Learning Community; fundamentals of peer mentoring while participating in co-curricular activities; emphasis on building supportive relationships on a college campus.
Prerequisites: Freshman classification or approval of instructor; on-campus residence; ALED 125.

ALED 228 Directed Studies in Agricultural Leadership and Development
Credits 1 to 4. 1 to 4 Other Hours.
Prerequisite: Approval of department advisor.

ALED 291 Research
Credits 1 to 4. 1 to 4 Lecture Hours.
Research conducted under the direction of faculty member in agricultural development. May be repeated for credit.
Prerequisite: Approval of department advisor.

ALED 301 Personal Leadership Education
Credits 3. 3 Lecture Hours.
Development, application and reflection of personal leadership capabilities through self-assessments and experiential learning activities; development of leadership identity through personal leadership inventories including strengths, personality type, values, vision and emotional intelligence.
Prerequisite: ALED or USAL-LED major; junior, or senior classification; grade of C or better in ALED 202.
ALED 313 Culture Theory, Orientation and Adaptation
Credits 3. 3 Lecture Hours.
Evaluation of culture theory, elements and manifestations of culture, assessing cultural norms of society or groups, adaptation to a new culture for effective leadership.
Prerequisite: Junior or senior classification.

ALED 339 Agricultural Extension Philosophy and the Land-Grant Mission
Credits 3. 3 Lecture Hours.
Philosophy of Cooperative Extension and roles within the land-grant system; history, organization, program areas and guiding principles; relationship with the teaching and research branches of the land-grant system.
Prerequisite: Junior or senior classification or approval of instructor.

ALED 340 Survey of Leadership Theory
Credits 3. 3 Lecture Hours.
Exploration of leadership as a scholarly discipline; critical analysis of and evolution of multiple leadership models and theories; synthesis of leadership theory through experiential learning; integration of course content with personal experiences.
Prerequisites: ALED or USAL-LED major, junior or senior classification.

ALED 341 Team Learning
Credits 3. 3 Lecture Hours.
Team development theory; emphasizes research on team member behaviors, team decision making models and positive conflict in team environments.
Prerequisites: Grade of C or better in ALED 340; junior or senior classification.

ALED 342 Learning Organizations
Credits 3. 3 Lecture Hours.
Social systems language and archetypes; systems thinking theory including mental models, mastery, team learning, concept models of human organizations.
Prerequisites: ALED 340; junior or senior classification.

ALED 343 Human Resource Management in Agriculture and Life Sciences
Credits 3. 3 Lecture Hours.
Principles, theories, concepts, techniques and applications for managing human resources in food and agricultural organizations and in local communities; attracting, staffing, training, developing and compensating human talent. Not intended for majors in business.
Prerequisites: ALED 340; junior or senior classification.

ALED 344 Leadership of Volunteers
Credits 3. 3 Lecture Hours.
Principles, theories, concepts, techniques and applications for leading volunteers in agriculture and life sciences nonprofit, governmental and community organizations.
Prerequisites: Grade of C or better in ALED 340; junior or senior classification.

ALED 380 Workshop in Agricultural Leadership and Development
Credits 1 to 4. 1 to 4 Lecture Hours.
The study, understanding and solution of human-agricultural problems based on theory learned in the classroom, library, laboratory and fieldwork completed by individuals and teams.
Prerequisite: Junior or senior classification.

ALED 400 Public Leadership Development
Credits 3. 3 Lecture Hours.
Major issues in the study of public leadership, development of leadership skills, and a field investigation done in conjunction with local public leaders.
Prerequisites: Junior classification and approval of instructor.

ALED 401 Advanced Professional Leadership Development
Credits 3. 3 Lecture Hours.
Investigation of the best practices of successful leaders representing various organizational contexts; merging of scholarly mastery of theory with practice.
Prerequisites: Selection for ALED Leadership Fellows Program; grade of C or better in ALED 340 or ALED 301; junior or senior classification.

ALED 422 Cultural Pluralism in Agriculture
Credits 3. 3 Lecture Hours.
Selected topics on the diversity of human resources in agriculture; emphasis on working in a multicultural society and developing a sensitivity toward different cultures; explores the interrelationships between the contributions of diverse individuals and the state, nation and global success of agriculture.
Prerequisite: Junior or senior classification.

ALED 424 Applied Ethics in Leadership
Credits 3. 3 Lecture Hours.
Exploration of ethical and moral theories and the application to multiple leadership contexts and situations.
Prerequisites: Junior or senior classification; grade of C or better in ALED 301.

ALED 426 Leading and Training Adult Learners
Credits 3. 3 Lecture Hours.
Planning educational training programs, including leadership programs, to implement with an adult audience; includes needs assessment, instructional design, lesson plan development, evaluation and other items related to leading adults.
Prerequisites: Grade of C or better in ALED 340, junior or senior classification.

ALED 440 Leading Change
Credits 3. 3 Lecture Hours.
Analysis of change models and theories and the leadership application on individual, organizational and societal changes.
Prerequisite: Junior or senior classification; grade of C or better in ALED 202.

ALED 441 Agricultural Extension Organization and Methods
Credits 3. 3 Lecture Hours.
Cooperative extension in agriculture and home economics; development, objectives, organization, program building and methods of teaching.
Prerequisite: Junior or senior classification.

ALED 442 Professional Communications in Agriculture and Life Sciences
Credits 3. 3 Lecture Hours.
Technological communication theory; instructional and presentation models; teaching strategies; multimedia development.
Prerequisite: Junior or senior classification.

ALED 481 Seminar
Credits 3. 3 Lecture Hours.
Individual and team approaches to the review of leadership concepts and their application; observation and discussion of current leadership trends and issues.
Prerequisites: ALED or USAL-LED major; senior classification; grade of C or better in ALED 202, ALED 301, ALED 340, ALED 440, and ALED 424.
ALED 485 Directed Studies in Agricultural Leadership Development  
Credits 1 to 4. 0 to 4 Lecture Hours. 1 to 4 Other Hours.  
Directed individual study of selected problems in agricultural leadership and development with emphasis on collection, analysis and presentation of information.  
Prerequisites: Junior or senior classification and approval of instructor.

ALED 489 Special Topics in...  
Credits 1 to 4. 1 to 4 Lecture Hours.  
Special topics in an identified area of agricultural development. May be repeated for credit.  
Prerequisite: Junior or senior classification.

ALED 491 Research  
Credits 1 to 4. 1 to 4 Lecture Hours.  
Research conducted under the direction of faculty member in agricultural development. May be repeated 2 times for credit. Registration in multiple sections of this course are possible within a given semester provided that the per semester credit hour limit is not exceeded. Please see academic advisor in department.  
Prerequisites: Junior or senior classification; approval of instructor.

ALED 494 Internship  
Credits 1 to 6. 1 to 6 Other Hours.  
Supervised internship and independent study related to student's professional interest.  
Prerequisites: Grade of C or better in ALED 301; junior or senior classification; 2.0 GPR; approval of instructor.

Agricultural Science  
AGSC 285 Directed Studies  
Credits 1 to 4. 1 to 4 Lecture Hours.  
Directed individual study of selected problems in agricultural science with emphasis on collection, analysis and presentation of information. May be repeated for credit.  
Prerequisite: Approval of instructor.

AGSC 289 Special Topics in...  
Credits 1 to 4. 1 to 4 Lecture Hours.  
Special topics in an identified area of agricultural science. May be repeated for credit.  
Prerequisite: Approval of department head.

AGSC 291 Research  
Credits 1 to 4. 1 to 4 Other Hours.  
Research conducted under the direction of faculty member in agricultural science. May be repeated 2 times for credit.  
Prerequisites: Freshman or sophomore classification and approval of instructor.

AGSC 301 Introduction to Agricultural Science Teaching  
Credits 3. 3 Lecture Hours.  
Introduction to agricultural science teaching at the secondary level; an overview of preparing teachers for a changing world including knowledge of learners, subject matter and teaching within the context of agricultural science.  
Prerequisite: Junior or senior classification; AGSC 384 or concurrent enrollment.

AGSC 305 Management of Supervised Agricultural Experiences  
Credits 3. 3 Lecture Hours.  
Overview of supervised agricultural experiences (SAEs) and content that can be used in the secondary agricultural science program; engagement in SAE programs; management practices for SAE projects including record keeping and student reports.  
Prerequisite: Junior or senior classification.

AGSC 373 Managing Safety in the Agricultural Science Program  
Credits 3. 2 Lecture Hours. 2 Lab Hours.  
Safety principles and procedures, methods of teaching and motivating students in agricultural mechanics; design for those preparing to teach agricultural science in Texas public schools.  
Prerequisite: Junior or senior classification.

AGSC 380 Workshop in Agricultural Science  
Credits 1 to 4. 1 to 4 Other Hours.  
The study, understanding and solution of human-agricultural problems based on theory learned in the classroom, library, laboratory and fieldwork completed by individuals and teams.  
Prerequisite: Junior or senior classification.

AGSC 383 Teaching Agricultural Mechanics  
Credits 3. 2 Lecture Hours. 3 Lab Hours.  
Methods of teaching and motivating students in agricultural mechanics; designed for students preparing to teach agricultural science in Texas public schools.  
Prerequisites: Grade of C or better in AGSC 301 and AGSC 373.

AGSC 384 Clinical Professional Experience in AGSC  
Credits 3. 2 Lecture Hours. 3 Lab Hours.  
Clinical field experience for students preparing to teach agricultural science in public schools of Texas; through first-hand observation, students will study learning theories, individual differences, teaching methods, classroom management, curriculum, school climate and culture, and teacher roles and responsibilities.  
Prerequisite: Grade of C or better and concurrent enrollment in AGSC 301; junior or senior classification.

AGSC 402 Designing Instruction for Secondary Agricultural Science Programs  
Credits 3. 2 Lecture Hours. 3 Lab Hours.  
Theory and practice in designing instruction for secondary agricultural science programs including effective planning and delivery methods; designed for students preparing to teach agricultural science in Texas public schools.  
Prerequisites: Grade of C or better in AGSC 384 and concurrent enrollment in AGSC 405; grade of C or better in INST 210 or concurrent enrollment.

AGSC 405 Facilitating Complete Secondary Agricultural Science Programs  
Credits 3. 2 Lecture Hours. 3 Lab Hours.  
Theory and practice in facilitating secondary agricultural science programs: includes classroom instruction, supervised experience, and youth leadership development; designed for students preparing to teach agricultural science in Texas public schools.  
Prerequisites: Grade of C or better in AGSC 384 and concurrent enrollment in AGSC 402; grade of C or better in INST 210 or concurrent enrollment.
AGSC 425 Learner Centered Instruction in Agricultural Science  
**Credits 3. 3 Lecture Hours.**  
Preparing curriculum materials for secondary agricultural science and adult education programs.  
**Prerequisites:** Grade of C or better in AGSC 402 and AGSC 405 and concurrent enrollment in AGSC 436, AGSC 481, and AGSC 484.

AGSC 436 Professional Teaching Internship in AGSC  
**Credits 6. 2 Lecture Hours. 12 Lab Hours.**  
Planning for and teaching secondary agricultural science in selected high schools in Texas; includes 12 weeks of professional teaching experience under the guidance of a university supervisor and a cooperating teacher in the school.  
**Prerequisites:** Grade of C or better in AGSC 402 and AGSC 405 and concurrent enrollment in AGSC 425, AGSC 481, and AGSC 484.

AGSC 481 Seminar  
**Credit 1. 1 Lecture Hour.**  
Review of current literature and research as related to program development in light of legislation and policies affecting education in agriculture.  
**Prerequisite:** Grade of C or better in AGSC 402 and AGSC 405.

AGSC 484 Field Experience  
**Credits 1 to 6. 1 to 6 Other Hours.**  
An on-the-job supervised experience program conducted in the area of the student's specialization.  
**Prerequisites:** Grade of C or better in AGSC 402 and AGSC 405 and concurrent enrollment in AGSC 425, AGSC 436, and AGSC 481.

AGSC 485 Directed Studies  
**Credits 1 to 4. 1 to 4 Lecture Hours.**  
Directed individual study of selected problems in agricultural science with emphasis on collection, analysis and presentation of information. May be repeated for credit.  
**Prerequisite:** Junior or senior classification; approval of instructor.

AGSC 489 Special Topics in...  
**Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.**  
Special topics in an identified area of agricultural science. May be repeated for credit.  
**Prerequisite:** Approval of department head.

AGSC 491 Research  
**Credits 1 to 4. 1 to 4 Other Hours.**  
Research conducted under the direction of faculty member in agricultural science. May be repeated 3 times for credit. Registration in multiple sections of this course are possible within a given semester provided that the per semester credit hour limit is not exceeded.  
**Prerequisites:** Junior or senior classification; approval of instructor.

AGSC 494 Internship  
**Credits 1 to 6. 1 to 6 Other Hours.**  
Supervised internship and independent study related to student’s professional interest.  
**Prerequisites:** AGSC 301; junior or senior classification; 2.0 GPR; approval of instructor.