

Texas A&M University
Agricultural Leadership, Education, and Communications (ALEC)
Graduate Course Listing

ALEC 601. **Advanced Methods in Agricultural Education.** [Credits: 3] (Online)

Learning theories; techniques and procedures to enhance the teaching-learning process; methods to evaluate learning. Prerequisite: Graduate Classification

ALEC 602. **Advanced Instructional Design in Agricultural Science.** [Credits: 3]

Designing instruction to meet learning outcomes, motivate students, and evaluate objectives; learning theories and their impact on the teaching and learning process; choosing appropriate teaching methods for specific content; evaluating the teaching-learning process for improvement within the context of secondary agricultural science classrooms. Prerequisite: Graduate Classification

ALEC 603. **Experiential Learning.** [Credits: 3]

This course focuses on theory and practice in facilitating learning from experiences in formal, informal, and non-formal settings. Topics covered include experiential learning in classroom/laboratory settings, guided inquiry, internships/externships, service learning, project-based learning, and outdoor/adventure learning. Prerequisite: Graduate Classification

ALEC 604. **Writing for Professional Publication.** [Credits: 3]

Scientific and technical writing is not an innate skill; it is a learned ability. Students are expected to expand their disciplines knowledge base through scholarly contributions to professional journals and research conferences. An intensive scientific and technical writing course provides students with the skills necessary to compose research proposals, conference papers, and journal articles.

Prerequisite: Introductory research course and graduate classification.

ALEC 605. **Facilitating Complete Secondary Agricultural Science Programs.** [Credits: 3]

Theory and practice in facilitating secondary agricultural science programs that include classroom instruction, supervised experience, and youth leadership development. Designed for students to preparing to each agricultural science in Texas public schools. Prerequisite: Graduate Classification

ALEC 606. **Foundations of Leadership Theory.** [Credits: 3]

Theory and practice of leadership theory foundational to leadership education. Focus on analysis of leadership theories in various professional settings. Prerequisite: Graduate Classification

ALEC 607. **Youth Leadership Programs.** [Credits: 3] (Online)

Methods and procedures of organizing and conducting youth leadership programs in school and non-school settings. Prerequisite: Graduate Classification

ALEC 608. **Leadership of Volunteers.** [Credits: 3] (Online)

Models of volunteerism; reasons for volunteers; assessment and evaluation techniques; task descriptions; organizational relationships. Prerequisite: Graduate Classification

ALEC 609. **Learning Organizations.** [Credits: 3]

This course focuses on theory and practice in facilitating learning from experiences in formal, informal, and non-formal settings. Topics covered include experiential learning in classroom/laboratory settings, guided inquiry, internships/externships, service learning, project-based learning, and outdoor/adventure learning. Prerequisite: ALED 340; Graduate classification.

ALEC 610. Principles of Adult Education. [Credits: 3] (Campus or Online)

Identification of basic principles motivating adults to learn. Procedures to implement these principles in bringing about changes in adult behavior. Prerequisite: Graduate Classification

ALEC 611. Advanced Methods in Distance Education. [Credits: 3] (Online)

Course design theory for synchronous and asynchronous instructional methodology; teaching and training models for distance education. Prerequisite: Graduate Classification

ALEC 612. Advanced Instructional Design for Online Learning. [Credits: 3] (Online)

Applies learning and teaching theory as the foundation for developing engaging online instruction. Pulls together theory, concepts, and strategies to provide a broad understanding of the fundamentals of online learning from the conceptual stage to the development and delivery stages. Focused on knowledge and skills necessary to create effective online courses, training programs, and learning units.

Prerequisite: Graduate Classification

ALEC 613. Techniques in eLearning Development and Delivery. [Credits: 3] (Online)

Provides knowledge and skills necessary to develop and deliver effective online courses, training programs, and learning units. Specific topics include: management of eLearning projects, needs assessment and audience analysis, creation and editing of documents, images, audio, and video. Focused on skills to create media for use in an online course. Prerequisite: Graduate Classification

ALEC 615. Philosophy of Agricultural Education. [Credits: 3]

Historical and philosophical developments in education that brought about education in agriculture; ideas of individuals that culminated in agricultural education institutions and organizations.

Prerequisite: Graduate Classification

ALEC 616. Facilitation of Leadership Programs. [Credits: 3]

Investigate models to design leadership education programs; incorporate strategies to enhance the leadership education process; critically analyze leadership education research and group leadership education processes.

Prerequisite: Graduate Classification

ALEC 617. Leadership in Organizational Culture and Ethics. [Credits: 3] (Online)

Integration of organizational culture and ethical theories; implications and role of leaders in organizational culture and ethical situations; critical analysis of organizational culture and ethics in agricultural organizations.

Prerequisite: Graduate classification.

ALEC 620. Instrumentation and Survey Research Methods. [Credits: 3]

Principles, theories, techniques, and applications for developing survey questionnaires and conducting survey research in agriculture; developing questions; constructing instruments; implementing surveys; and reducing coverage and sampling errors. Prerequisite: Graduate Classification

ALEC 622. Data Collection, Analysis, and Interpretation in Research in Agricultural Leadership, Education, and Communications. [Credits: 3]

Principles and techniques of data collection, analysis, and interpretation in agricultural leadership, education, and communications; interpretation and implications of finds/results in relation to current research; data analysis performed using statistical package software; collection, analysis, and interpretation to conform to published research in agricultural leadership, education, and communication.

Prerequisite: Research methods and basic statistics course, graduate classification.

ALEC 623. Survey of Evaluation Strategies for Agriculture. [Credits: 3] (Online)

This course is designed to pull together theory, concepts, and strategies to give students a broad understanding of the fundamentals of evaluation and to arm students with the knowledge and skills necessary to design and administer appropriate and effective evaluations.

Prerequisite: Graduate Classification

ALEC 624. Developing Funded Research Projects. [Credits: 3]

Students team with faculty mentor to develop a proposal for external funding from a federal agency; principles discussed to produce competitive proposals; proposal steps adapted to fit interests of the students and faculty. Masters level offered in Spring; Doctoral level offered in Fall.

Prerequisite: Graduate Classification

ALEC 625. Program Evaluation and Organizational Accountability. [Credits: 1 to 3] (Campus or Online)

Examines the philosophy, methods, and issues of accountability and evaluation necessary to meet expectations of institutional mandates. Special emphasis on analytical tools and performance measures.

Prerequisite: Graduate Classification

ALEC 630. Guidance and Counseling for Rural Youth. [Credits: 3] (Online)

Problems of youth with special attention given to rural youth; theories of vocational development reviewed and techniques and procedures developed to help youth make career choices.

Prerequisite: Graduate Classification

ALEC 631. Developing and Planning of Community Education Programs. [Credits: 3]

Focuses on the principles, theories, techniques, and applications for developing and planning educational programs in a community setting; program development strategies focusing on educational programming in relation to issues identified citizens will be developed and enhanced in this course.

Prerequisite: Graduate Classification

ALEC 640. Methods of Technological Change. [Credits: 3] (Campus or Online)

Dynamics of cultural change as theoretical framework for planned technological change; methods of planning and implementing change, its effects and how it can be predicted.

Prerequisite: Graduate Classification

ALEC 644. The Agricultural Advisor in Developing Nations. [Credits: 3]

Trends, conditions, critical incidents, techniques, roles, and preparation affecting the success of persons desiring to provide technical assistance in projects of agricultural development by serving as agricultural advisors in developing nations, especially in cross cultural settings.

Prerequisite: Graduate Classification

ALEC 645. Initiating, Managing, and Monitoring Projects of International Agricultural Development.

[Credits: 3] Origin of projects in agricultural development involving host governments; procedures in developing contracts with sponsors; duties and responsibilities of contract administrators, project leaders, and the home institution; reporting systems, project reviews, and evaluation procedures; procedures effective in managing projects.

Prerequisite: Graduate Classification

ALEC 646. Institutions Serving Agriculture in Developing Nations. [Credits: 3]

Comparisons among programs and functions, strengths and weaknesses, organization, and relationships of institutions and agencies in public sectors serving agriculture in developing nations; includes those responsible for agricultural extension, agricultural research, agrarian reform, price stabilization, agricultural credit and agricultural cooperatives.

Prerequisite: Graduate Classification

ALEC 681. **Seminar.** [Credits: 1 (offered each semester)] (Campus or Online)

Group study and discussion of current developments in agricultural education; research and legislation as they affect programs in teacher education, agricultural science and related areas of education.

Prerequisite: Graduate Classification

ALEC 684. **Professional Internship.** [Credits: 1 to 6]

An on-the-job supervised experience program conducted in the area of the student's specialization.

Prerequisite: Graduate classification; Approval of instructor of record.

ALEC 685. **Directed Studies.** [Credits: 1 to 4]

Studies related to classroom, laboratory, supervised activities in agriculture, work experience, extension education and adult educational activities in agricultural programs.

Prerequisite: Graduate classification; Approval of instructor of record.

ALEC 690. **Theory of Agricultural Education Research.** [Credits: 3]

Theory and design of research problems in agricultural education; communication of research proposal and results of research; evaluation of current research of faculty and students; review of current research literature. May be taken three times for credit.

Prerequisite: Graduate Classification

ALEC 691. **Research.** [Credits: 1+ (each semester)]

Initiation and completion of research for advanced degree.

Prerequisite: Graduate classification; Approval of instructor of record.

ALEC 692. **Professional Study.** [Credits: 1+ (each semester)]

Approved professional study of project undertaken as the terminal requirement for degree of Doctor of Education; preparation of a record of study summarizing the rationale, procedure, and results of the completed project.

Prerequisite: Graduate classification; Approval of instructor of record.

ALEC 693. **Professional Study in Agricultural Leadership, Education, and Communications.** [Credits: 3]

Approved professional paper undertaken as the requirement for the Master of Agriculture. May be taken more than once, but note to exceed 3 hours of credit toward a degree.

Prerequisite: Graduate classification; Approval of instructor of record.

ALEC 695. **Frontiers in Research.** [Credits: 3] (Campus or Online)

Basic concepts of quantitative and qualitative research; understanding the social science research process; using appropriate methods to address research problems; enabling students to effectively evaluate, consume, and communicate research findings.

Prerequisite: Graduate classification

ALEC 696. **Qualitative Research Methods.** [Credits: 3] (Online)

Overview of qualitative research in agricultural education including conducting a literature review, writing a working hypothesis, keeping methodological and reflexive journals, developing data gathering tools, performing data analysis, ensuring trustworthiness measures, and writing a research manuscript.

Prerequisite: ALEC 695 and graduate classification.