

# AGRICULTURAL SCIENCES (AGRI)

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**AGRI 5300. Adv Fusng& Joinng Met& Non-Met. 3 Hours.**

Principles and techniques of bonding and fusing metallic materials by the electric and oxyacetylene processes. Study of fluxes, chemicals, and oxidants used in joining metal. Joining of non-metallic materials by mechanical and chemical means.

**AGRI 5310. Mchnzd Harvest & Hand Ag Prods. 3 Hours.**

Fundamentals of selection, service, and operation of agricultural harvesting machines. Analysis and development of mechanical systems to feed and care for livestock. Storage and handling facilities for agricultural products.

**AGRI 5330. Advanced Rural Utilities. 3 Hours.**

Selection and use of electrical equipment as related to efficiency and economy in agricultural production, processing and storage of feeds, forage crops and grain in connection with livestock enterprises.

**AGRI 5340. Adv Animal Growth & Performnce. 3 Hours.**

This course is an advanced study of physiological and endocrine factors affecting growth and performance of domestic animals. The course includes the study of meat animal growth and developmental processes as they affect body and carcass composition, carcass quality and retail value.

**Prerequisite:** Graduate standing.

**AGRI 5341. Contemporary Animal Ag Issues. 3 Hours.**

This course will investigate contemporary issues in animal agriculture and the food/meat industry. Primarily using in-depth discussion and debates, students will analyze issues from the standpoint of producers, consumers, processors, and societal forces. This course will allow students to explore differing viewpoints on an issue and prepare them to encounter these issues in their professional career.

**AGRI 5350. Adv Princ Livestock Mngt. 3 Hours.**

Survey of current knowledge and concepts of beef production with emphasis on the stocker/feedlot segment. Includes feeding, management, marketing and disease control of stocker and feedlot cattle.

**AGRI 5360. Contemporary Issues In Agr Bus. 3 Hours.**

Analysis and discussion of current issues in agricultural business with appropriate principles and theories. Issues may include marketing, management, finance, policy, international, legal and ethical topics. Student participation is expected via reports throughout the semester or term reports.

**AGRI 5361. Agricultural Policy. 3 Hours.**

Advanced analysis of government policies and programs important to agriculture. Topics include: the policy making process and leaders, interest groups, organization and functions of federal and state agencies, policies relevant to production agriculture and natural resources, rural development, consumer and food safety, international marketing and food distribution.

**AGRI 5362. Principles Of Crop Protection. 3 Hours.**

Diagnosis, epidemiology, and control of plant pests. Causative and limiting factors are stressed. Designed for prospective or practicing teachers and technicians in the agro-chemical industry or in federal or state plant pest control agencies.

**AGRI 5364. Agricultural Internship. 3 Hours.**

A directed study utilizing industry to develop an understanding of agricultural production and management principles.

**AGRI 5369. Spcl Topics In Adv Agriculture. 3 Hours.**

This course will examine advanced special topics/issues and (or) subject matter in the field of Agricultural Science. The sub-divisional fields offered are: Agriculture, Animal Science, Agricultural Business, Horticulture and Crop Science, and Agricultural Mechanization. This course may be repeated as topics and subject matter change.

**AGRI 5370. Food And Fiber Crops. 3 Hours.**

A study of traditional plant breeding techniques and an overview of contemporary crop improvement methods. The physiology, adaptation, classification, taxonomy, and utilization of major crop species used for production of food and fiber are covered. Genetic and environmental influences on crop quality are discussed.

**AGRI 5379. Advanced Equine Nutrition. 3 Hours.**

This course is an advanced review of the equine digestive system regarding anatomy, physiology, digestive processes, nutrient requirements, feedstuffs, management, and health care.

**AGRI 5386. Capital Mgt In Agr Business. 3 Hours.**

This course provides an in-depth understanding of capital marketing, capital budgeting, financial planning, and appraisal principles important in the field of agribusiness.

**AGRI 5394. Applied Horticultural Science. 3 Hours.****AGRI 5398. Economics Of Agricultural Prod. 3 Hours.**

Agricultural production principles applied to the use of resources; cost analyses of production enterprises; linear programming of enterprises for maximizing returns; elements of depreciation schedules; evaluation for income tax purposes.

**AGRI 6099. Thesis. 1-3 Hours.**

In addition to the preliminary study of the techniques of research, these courses involve completion of a bibliography, organization of material, selection of a suitable problem, a digest of related literature, selection of appropriate procedures, formulation of a plan of investigating and reporting, collection and organization of data, and the writing of the thesis. Variable Credit (3 hrs first semester; 1 hour subsequent semesters).

**AGRI 6140. Graduate Seminar. 1 Hour.**

This course is designed to provide students a forum for presentation of their graduate project and to provide an opportunity for faculty to present seminars relative to contemporary issues in agriculture. The project is an agreement between student and his/her committee. Course cannot be repeated.

**Prerequisite:** AGRI 5375 or STAT 5360.

**AGRI 6350. Tchnqs & Interpretatn Research. 3 Hours.**

A course designed to develop the competencies needed to interpret and utilize agricultural research. Topics will include: the philosophy of the scientific method, formats for agricultural research data, interpretation of data, and application of information to specific situations.

**Prerequisite:** AGRI 5375 or STAT 5360.

**AGRI 6398. Thesis. 3 Hours.**

In addition to the preliminary study of the techniques of research, these courses involve completion of a bibliography, organization of material, selection of a suitable problem, a digest of related literature, selection of appropriate procedures, formulation of a plan of investigating and reporting, collection and organization of data, and the writing of the thesis. Grade is either Credit or No Credit.