DASC - DAIRY SCIENCE (DASC)

DASC 202 Dairying
Credits 3. 2 Lecture Hours. 2 Lab Hours.
(AGRI 1311) Dairying. Survey of dairy industry; dairy breeds, standards for selection and culling, herd replacements, feeding, management, physiology and health maintenance; food value of milk, tests for composition and quality, use and processing of market milk and dairy products.

DASC 312/FSTC 312 Food Chemistry
Credits 3. 3 Lecture Hours.
The fundamental and relevant chemistry and functionality of the major food constituents (water, carbohydrates, lipids, proteins, phytochemical nutraceuticals) and study of food emulsion systems, acids, enzymes, gels, colors, flavors and toxins.
Prerequisite: CHEM 227, CHEM 237 or approval of department head or instructor.
Cross Listing: FSTC 312/DASC 312.

DASC 313/FSTC 313 Food Chemistry Laboratory
Credit 1. 3 Lab Hours.
Laboratory exercises investigating specific molecules, such as food acids, enzymes, pigments and flavors, and chemical interactions in foods, such as oxidation reactions, emulsion systems, and functional properties from a fundamental chemistry rather than an analytical perspective.
Prerequisite: CHEM 227, CHEM 237 or approval of department head or instructor.
Cross Listing: FSTC 313/DASC 313.

DASC 314/FSTC 314 Food Analysis
Credits 3. 1 Lecture Hour. 4 Lab Hours.
Selected standard methods for assay of food components; principles and methodology of both classical and instrumental techniques for food analysis.
Prerequisite: CHEM 238 or CHEM 242.
Cross Listing: FSTC 314/DASC 314.

DASC 326/FSTC 326 Food Bacteriology
Credits 3. 3 Lecture Hours.
Microbiology of human foods and accessory substances; raw and processed foods; physical, chemical and biological phases of spoilage; standard industry techniques of inspection and control.
Prerequisites: BIOL 206 or approval of instructor; junior or senior classification.
Cross Listing: FSTC 326/DASC 326.

DASC 327/FSTC 327 Food Bacteriology Lab
Credit 1. 3 Lab Hours.
Laboratory to accompany DASC 326/FSTC 326.
Cross Listing: FSTC 327/DASC 327.

DASC 400 Animal Science Industry Studies
Credits 1 to 3. 1 to 3 Other Hours.
Organized instruction based on well-planned visits to selected industry operations which produce, process or market animal and dairy products, or produce and market supplies and materials to support animal industries; acquaint students with such operations, to reinforce campus-based instruction and to acquaint prospective employers with Texas A&M students. Field trips will normally be made during holidays or between sessions for which departmental fees may be assessed to cover costs.
Prerequisites: Junior or senior classification; approval of instructor organizing study tour; 2.0 GPR in major and overall.

DASC 418 Feeding and Management of Dairy Cattle
Credits 4. 3 Lecture Hours. 2 Lab Hours.
Dairy farm management; feeding and care of the dairy herd; raising calves for dairy replacements and for beef; developing dairy heifers; care of dry and fresh cows; optimum return rations for milk production; disease control; forage handling and storage; buildings and related topics.
Prerequisites: ANSC 318; DASC 202; DASC 400 also to be taken concurrently or approval of instructor.

DASC 485 Directed Studies
Credits 0 to 4. 0 to 4 Other Hours.
Special problems in dairy production or dairy manufacturing.
Prerequisites: Junior or senior classification; written approval of professor supervising the activity; 2.0 GPR in major and overall.