

# THE SCHOOL OF AGRICULTURE AND CONSUMER SCIENCES

Chandra Reddy, Ph.D., Dean and Director of Land Grant Programs

125 Farrell-Westbrook, Research and Extension Complex

Carter Catlin, Jr., Ph.D., Interim Associate Dean for Research

Clyde Chesney, Ph.D., Interim Associate Dean for Extension

**Mission Statement:** The School of Agriculture and Consumer Sciences fosters and integrates teaching, research, and extension. By providing quality science-based education, the School enables individuals of diverse backgrounds to achieve advancements within family, food, and agricultural systems, thereby improving lives in Tennessee, the nation, and the global society.

**General Statement:** The School of Agriculture and Consumer Sciences is the premier land-grant unit of Tennessee State University. As such, the School undertakes teaching, research and extension functions through two academic departments—the Department of Agricultural Sciences and the Department of Family and Consumer Sciences. The departments offer three Bachelor of Science degrees with majors in Agricultural Sciences, Family and Consumer Sciences, and Early Childhood Education. The major in Agricultural Sciences offers the following concentrations: Agribusiness, Agricultural Education, Animal Science & Pre-veterinary Medicine, Food Technology, Applied Geospatial Information Systems (GIS), and Plant and Soil Science. The major in Family and Consumer Sciences offers the following majors or concentrations: Early Childhood Education (PreK-3 certification) and Family and Consumer Sciences with concentration in one of the following: Child Development and Family Relations, Design, Fashion Merchandising, Family and Consumer Sciences Education, Foods and Nutrition (Dietetics), and Food Service Management. Also offered is a certification in Family Financial Planning (6 courses).

**Departmental Requirements:** The requirements for each program are listed under the respective Department.

## DEPARTMENT OF AGRICULTURAL SCIENCES

Constantine L. Fenderson, Ph.D., Head

108 Lawson Hall

Faculty: S. Comer, D. Duseja, R. Harrison, W. Hayslett, M. Lema, C. Reddy, S. Singh

### **Departmental Goals:**

- 1) To maintain a responsive teaching and learning environment
- 2) To attract, retain and graduate outstanding students
- 3) To advance biotechnology and biodiversity
- 4) To ensure the viability of small-scale agriculture
- 5) To protect the environment and natural resources
- 6) To use innovative technologies in our academic programs

### **Departmental objectives:**

- 1) To recruit high quality students, follow their progress through the program, and insure that they graduate in a timely manner with high levels of achievement;

- 2) To produce graduates who have the capability to apply the concepts of the agricultural sciences to solving problems encountered in government, education, industry, and society in general;
- 3) To produce graduates who have in-depth knowledge and experience in the agricultural sciences, and expertise in their chosen field;
- 4) To produce graduates who are capable of evaluating and defining diverse problems, evaluating and developing feasibility studies, analyzing and interpreting data, and developing, implementing, and evaluating acceptable solutions to professional problems;
- 5) To produce graduates who are able to communicate information to diverse groups at all levels of expertise;
- 6) To produce graduates who are capable of using computer-based information systems to solve problems;
- 7) To produce graduates who understand their responsibility to their profession, to society in general, and to the furtherance of life-long learning;
- 8) To produce graduates capable of functioning successfully on multi-disciplinary teams and;
- 9) To produce graduates capable of further graduate studies.

General Statement: The curricula in the Department of Agricultural Sciences are designed to provide both liberal and specialized education for students who seek to advance their education in the field of agriculture. The program in liberal education involves the social sciences, the natural sciences, the humanities and the arts, and is designed to prepare students to understand and function in a very complex environment. The specialized program is designed to provide understanding and training in the complex scientific field of agriculture. The overall program offers curricula leading to the Bachelor of Science (B.S.) degree in Agricultural Sciences, with concentrations in Agribusiness, Agricultural Education, Animal Science/Pre-Veterinary Medicine, Food Technology, Geospatial Information Systems, and Plant and Soil Science. No grade less than "C" in any major course (Agricultural Sciences course) will be accepted as credit toward meeting departmental requirements.

#### UPPER DIVISION POLICY

Students majoring in Agricultural Sciences must gain upper division status before enrolling in any upper division courses (3000 & 4000 levels). Upper division courses taken prior to being given upper division status may not be accepted towards the B.S. degree. Students may be admitted to the upper division after completing at least 60 degree-level lower division credits (as set out in the curriculum) with a minimum cumulative grade point average (GPA) of 2.0. It is the responsibility of the student to submit a formal petition to the department. Such petition will be reviewed by a departmental committee to ensure that all criteria have been met.

Departmental Requirements  
For Bachelor of Science  
Agricultural Sciences

**MAJOR CORE:** A minimum of 26 semester hours including, AGSC 1200, 1410, 2010, 2200, 2410, 2510, 4500, 4710, 4720 and SAHE 1000.

**General Education:** 41 semester hours including: Communications – 9 hours – ENGL 1010, 1020, COMM 2200; Humanities and/or Fine Arts – 9 hours – ENGL 2010-2024 (3 hours), ART 1010, MUSC 1020, or PHIL 2010; Social & Behavioral Sciences – 6 hours – SOCI 2010, PSYC 2010 or ECON 2010 & 2020; History – 6 hours – HIST 2010, 2020 or 2030; Natural Sciences – 8 hours – CHEM 1110/1111 & 1120/1121 or BIOL 1010/1011 and Mathematics – 3 hours – MATH 1110, 1120 or 1410.

Suggested Four Year Plan:

Bachelor of Science Degree in  
Agricultural Sciences  
Concentration in Agribusiness

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000	1	ENGL 1020	3
ENGL 1010	3	MATH 1120	3
MATH 1110	3	AGSC 1200	3
AGSC 1410	3	AGSC 2020	3
AGSC 2010	3	AGSC 2410	3
ECON 2010	3		
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	16		15

SOPHOMORE YEAR

ENGL 2010-2018	3	Humanities Elective	3
BIOL 1010, 1011	4	BIOL 1020, 1021	4
HIST 2010	3	HIST 2020	3
ACCT 2010	3	COMM 2200	3
AGSC 2040	3	AGSC 2200	4
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	16		17

JUNIOR YEAR

AGSC 3000	3	AGSC 3010	3
AGSC 3040	3	AGSC 3030	3
AGSC 3120	3	AGSC 3130	3
HUMANITIES ELECTIVE	3	MGMT 3010	3
AGSC 2510	4	ECON 2020	3
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	16		15

SENIOR YEAR

AGSC 4010	3	AGSC 4020	3
AGSC 4500	3	AGSC 4040	3
AGSC 4710	1	AGSC 4080	3
ELECTIVES	3	ELECTIVES	3
GUIDED ELECTIVES	3		
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	13		12

Suggested Four Year Plan:

Bachelor of Science Degree in  
Agricultural Sciences  
Concentration in Agricultural Education

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000	1	ENGL 1020	3
ENGL 1010	3	AGSC 1200	3
AGSC 1410	3	AGSC 2020	3
AGSC 2010	3	PSYC 2010	3
AGSC 2040	3	AGSC 2410	3
MATH 1110	3		
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	16		15

SOPHOMORE YEAR

ENGL 2010-2028	3	HUMANITIES ELECTIVE	3
CHEM 1110, 1111	4	CHEM 1120, 1121	4

HIST 2010	3	PSYC 2420	3
COMM 2200	3	AGSC 2200	3
EDCI 2010	3	HIST 2020	3
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	16		17

#### JUNIOR YEAR

HUMANITIES ELECTIVE	3	AGSC 3060	3
AGSC 3080	3	AGSC 3090	3
AGSC 3070	3	EDSC 3330	3
EDRD 4910	3	PSYC 3120	3
SOCIAL/BEHAVIORAL ELECT	3	AGSC 2510	4
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	15		16

#### SENIOR YEAR

EDAD 4000	3	AGSC 4050	9
GUIDED ELECTIVES	3	EDCI 4705	3
AGSC 4500	3		
AGSC 4710	1		
GUIDED ELECTIVES	3		
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	13		12

GUIDED ELECTIVES FOR CERTIFICATION:

GUIDED ELECTIVES FOR NON-  
AGRICULTURAL EDUCATION  
CERTIFICATION:

Agricultural (30 semester hours)

Education (30 semester hours)

EDAD 4000	AGSC 3000, 3010, 3020, 3030, 3040,
EDCI 3110	3120, 3130, 3200, 3210, 3220, 3230,
EDRD 4910	3240, 3320, 3330, 3340, 3350, 3400,
EDSE 3330	3420, 3430, 3440, 3450, 4010, 4040,
PSYC 3120	4070, 4080, 4090, 4230, 4250, 4260,
EDCU 420A	4310, 4430
AGSC 4500	

Suggested Four Year Plan:

### Bachelor of Science Degree in Agricultural Sciences Concentration in Animal Science/Pre-Veterinary Medicine

#### FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER			
SAHE 1000	1	ENGL 1020	3		
ENGL 1010	3	HIST 2020	3		
HIST 2010	3	MATH 1120 or 1410	3		
MATH 1110	3	AGSC 1200	3		
AGSC 1410	3	AGSC 2410	3		
AGSC 2010	3			<hr/>	<hr/>
	16		15		

#### SOPHOMORE YEAR

ENGL 2010-2028	3	HUMANITIES ELECTIVE	3
CHEM 1110, 1111	4	CHEM 1120, 1121	4
COMM 2200	3	AGSC 2200	4
AGSC 2040	3	SOCIAL/BEHAVIORAL ELECT	3
SOCIAL/BEHAVIORAL ELECT	3	AGSC 2510	4
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	16		18

#### JUNIOR YEAR

CHEM 2110 & 2111	4	AGSC 3440	3
AGSC 3400	3	AGSC 3450	3

AGSC 3410	3	GUIDED ELECTIVES	3
AGSC 3420	3	GUIDED ELECTIVES	3
HUMANITIES ELECTIVE	3		
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	16		12

#### SENIOR YEAR

CHEM 3410, 3411	4	AGSC 4430	3
AGSC 4410	3	AGSC 4440	3
AGSC 4500	3	AGSC 4720	1
AGSC 4710	1	GUIDED ELECTIVES	3
GUIDED ELECTIVES	3	GUIDED ELECTIVES	3
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	14		13

GUIDED ELECTIVES: Animal Science (22 semester hours)

AGSC 3000, 3010, 3240, 3250, 3430, 3500, 3510, 3520, 3550, 4080, 4420, 4450

GUIDED ELECTIVES: Pre-Veterinary Medicine (22 semester hours)

BIOL 1110, 1111, 1120, 1121, 2110, and 2111

CHEM 2120, 2121, 3420 and CHEM 3421

PHYS 2010, 2011, 2020, 2021

MATH 1830

#### Suggested Four Year Plan:

### Bachelor of Science Degree in Agricultural Sciences Concentration in Food Technology

#### FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000	1	ENGL 1020	3
ENGL 1010	3	HIST 2020	3
HIST 1010	3	AGSC 1200	3
MATH 1110	3	AGSC 2200	4
AGSC 1410	3	AGSC 2410	3
AGSC 2010	3		
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	16		16

#### SOPHOMORE YEAR

ENGL 2010-2028	3	HUMANITIES ELECTIVE	3
CHEM 1110,1111	4	CHEM 1120, 1121	4
AGSC 2040	3	SOCI 2010	3
HUMANITIES ELECTIVE	3	BIOL 1110, 1111	4
COMM 2200	3	BEHAVIORAL ELECTIVE	3
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	16		17

#### JUNIOR YEAR

CHEM 2110, 2111	4	CHEM 2120, 2121	4
AGSC 3500	3	AGSC 3510	3
BIOL 2400, 2401	4	AGSC 3520	3
AGSC 2510	4	AGSC 3530	4
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	15		14

#### SENIOR YEAR

AGSC 3540	3	AGSC 4460	3
AGSC 4430	3	AGSC 4500	3
AGSC 4710	1	CHEM 3420	3
CHEM 3410, 3411	4	ELECTIVES (Ag Bus)	3
AGSC 4450	3		
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	14		12

Suggested Four Year Plan:

Bachelor of Science Degree in  
Agricultural Sciences  
Concentration in Applied Geospatial Information Systems

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000	1	ENGL 1020	3
ENGL 1010	3	AGSC 1200	3
MATH 1110	3	AGSC 2200	4
AGSC 1410	3	AGSC 2510	4
AGSC 2010	3	GEOG 1020	3
GEOG 1010	3		
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	16		17

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 2010	3	HIST 2020	3
CHEM 1010 or BIOL 1010	3	Humanities Elect.	3
CHEM 1011 or BIOL 1011	1	CHEM 1020 or BIOL 1020	3
COMM 2200	3	CHEM 1021 or BIOL 1021	1
HIST 2010	3	Humanities Elect.	3
AGSC 3200	4	Soc/Behav. Elect.	3
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	17		16

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Soc./Behav. Elect.	3	AGSC 3580	3
AGSC 3350	3	AGSC 3590	3
AGSC 3550	3	AGSC 3600	3
AGSC 3560	3	AGSC 3340	3
AGSC 3570	3		
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	15		12

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
AGSC 4230	4	AGSC 4530	3
AGSC 4500	3	AGSC 4540	3
AGSC 4510	3	AGSC 4550	3
AGSC 4520	3	AGSC 4560	3
AGSC 4710	1	AGSC 4720	1
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	14		13

Suggested Four Year Plan

Bachelor of Science Degree in  
Agricultural Sciences  
Concentration in Plant and Soil Science

Plant and Soil Science

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000	1	ENGL 1020	3
ENGL 1010	3	AGSC 2510	4
HIST 2010	3	AGSC 1200	3

MATH 1110	3	AGSC 2410	3
AGSC 1410	3	COMM 2200	3
AGSC 2010	3		
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	16		16

#### SOPHOMORE YEAR

ENGL 2010-2018	3	SOCIAL/BEHAVIORAL ELECT	3
CHEM 1110/BIOL 1110	3	CHEM 1120/BIOL 1120	3
CHEM 1111/BIOL 1111	1	CHEM 1121/BIOL 1121	1
HUMANITIES ELECTIVE	3	AGSC 2200	4
SOCIAL/BEHAVIORAL ELECT	3	HUMANITIES ELECTIVE	3
		HIST 2020	3
	—		—
	13		17

#### JUNIOR YEAR

CHEM 2110	3	AGSC 3250	3
AGSC 3200	4	AGSC 3300	3
AGSC 3210	3	AGSC 3350	3
AGSC 3240	3	GUIDED ELECTIVES	3
AGSC 3340	3	GUIDED ELECTIVES	3
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	16		15

#### SENIOR YEAR

AGSC 3260	3	AGSC 4230	4
AGSC 3320	3	AGSC 4310	3
AGSC 4220	4	AGSC 4500	3
AGSC 4710	1		
GUIDED ELECTIVES	3	GUIDED ELECTIVES	3
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	14		13

GUIDED ELECTIVES\*: Plant and Soil Science

AGSC 3200, 3210, 3220\*\*, 3230\*\*, 3240, 3250, 3260, 3300, 3320, 3330, 3340, 3350, 3550, 3560, 3570, 3580, 3590, 3600, 4210\*\*, 4220\*\*, 4230\*\*, 4240, 4250, 4260, 4310, 4510, 4520, 4530, 4540, 4550, 4560, CHEM 3410 and 3411

GUIDED ELECTIVES\* 15 Credit Hours

\*Guided electives will be chosen from listed courses based upon the student's career interests.

\*\*Students interested in soil science as a career will choose a minimum of 15 credit hours from the soils category of listed courses.

### COURSE DESCRIPTIONS

**SAHE 1000 Orientation (1).** A course required of all entering freshmen and new students under the age of 21. Transfer students who have had orientation at TSU do not have to take this course. However, students transferring from another university with less than 60 credits must take orientation. It is designed to aid in the adjustment of freshmen and new students to the college community and to all facets of university life including academic adjustment, effective study habits, student support services, and varied life-styles.

#### AGRICULTURAL SCIENCES (AGSC)

**AGSC 1200 Introduction to Plant Science (3).** A one semester, introductory course in plant science that exposes students to the principles of crop science, horticulture, and conservation of the renewable natural resources. Two lectures and one laboratory period per week.

**AGSC 1410 Introduction to Animal Science (3).** A course devoted to the adaptation of the different classes of farm livestock to varying farm conditions and to the relationship of each class to the other in different farm plans. A careful study of the correct types of livestock in relationship to economical production and market demands. Two lectures and one laboratory period per week.

**AGSC 2010-2020 Introduction to Agribusiness (3-3).** The role of agricultural business in the economy. Application of principles and method of economics to agricultural economy with emphasis on agriculture - including the organization, management, marketing and finance of agricultural enterprises and evaluation of politics, programs, and institutions.

AGSC 2040 – Computer and Statistical Application in Agriculture (3). Computer concepts and basics of use of computer for decision-making. Emphasis on agricultural management concepts, management of data, and statistical analysis, use of popular software in agribusiness.

AGSC 2200 Fundamentals of Soil Science (4). A study of the origin, structure, general nature of soil and the factors related to soil fertility, maintenance, and fertility practices. Three lectures and one laboratory period per week.

AGSC 2410 Introduction to Poultry Science (3). An introduction to the poultry industry and a fundamental study of the anatomy and physiology of the fowl. Principles and practices in incubation, production and marketing of chickens, turkeys and specialized fowl. Management, automation and production economics will also be emphasized. Two lectures and one laboratory period per week.

AGSC 2510 Fundamentals of Geospatial Information Systems (4). Introduction to GIS principles and technology. This course presents a foundation for creating, editing, querying, and presenting geospatial data. Laboratory exercises use a hands-on approach to learning GIS software and hardware. This course is multidisciplinary and is designed for students in any field of study. Prerequisite: AGSC 2040 or equivalent.

AGSC 3000 Agricultural Marketing (3). An understanding of the operations of food marketing (theory of marketing) and a familiarity with many of the descriptive and factual aspects of food marketing. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 3010 Farm Management (3). Organization planning and operating farm business to make the most effective use of available resources and procedures for making economic decisions. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 3020 Food Economics (3). An examination of the food prices and their effect on the consumers' and farmers' budgets. Food price determination and the marketing channels. International trade and development. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 3030 Natural Resource Economics (3). A Study of the physical, economic and institutional factors affecting land and water use; population and resource requirements; principles of land utilization; social control of land, property, and land tenure. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 3040 Agricultural Policy (3). A study of problems in agriculture, governmental policies, and programs assigned to deal with them.

AGSC 3050 Adult Education in Agriculture/ Agribusiness 3010 (3). Administering, planning, organizing, and arranging courses and programs for adults in agriculture /agribusiness are covered in this class. Emphasis is to implement cooperative experience, public relation and philosophy and development of vocational education. Supervised field experiences in junior and senior high schools required for teacher education students.

AGSC 3060 Intra-Curricular and Related Activities in Agricultural Education (3). Planning and supervision of agricultural experience programs and youth organizations; establishment and maintenance of necessary reports and records; development and use of instructional materials; and operation and use of audio and visual equipment are covered in this class.

AGSC 3070 Methods of Teaching and Management in Vocational Agriculture (3). A study of teaching methods, materials, and concepts of classroom management for teaching vocational agriculture. Emphasis will be placed on developing a program of vocational agriculture/agribusiness that will relate to a total school; agricultural business and/or industry's program. Supervised field experiences in junior and senior high schools required for teacher education students.

AGSC 3080 Methods of Teaching Agricultural Mechanics (3). Developing agricultural mechanics programs, application of methods, practices, and skills; study of shop layouts; equipment, organization, and laboratory exercises. Two lectures - one laboratory. Supervised field experiences in junior and senior high schools required for teacher education students.

AGSC 3090 Introduction to Agricultural Engineering (3). The fundamental principles of agricultural power and machinery; agricultural arc and acetylene welding; agricultural structures; soil and water conservation, and agricultural uses of electricity. One lecture and two laboratory periods per week.

AGSC 3120 Introduction to Applied Statistics I (3). Basic concepts and principles of measurements, data collection, scientific investigation, and survey design. Topics include statistical measures of central tendency and dispersions, probabilities, normal and other distributions, tests of significance, regression and correlation, analysis of variance and index numbers. Prerequisite: Six hours of college math.



AGSC 3130 Sample Survey Theory and Techniques (3). A practical course in conducting, analyzing, and summarizing surveys; includes review of probability, distribution, and statistical measures; simple random sampling, stratified, systematic and cluster sampling, multi-frame, objective measurement, and enumerative surveys; sampling and non-sampling errors. Questionnaire design and enumeration techniques are included. Prerequisite: AGSC 3120.

AGSC 3185 Cooperative Education (3). A university-wide program that combines academic study with meaningful work experiences directly related to the student's academic major.

AGSC 3200 General Agricultural Botany (4). A course designed to provide a broad understanding of the fundamental facts and principles of botanical science. Three lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3210- Principles of Crop Science (3). A general study of the distribution, culture, use, and climatic adaptation of the major agronomic crop plants. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3220 Soil and Environmental Chemistry (3). A study of the chemical, mineralogical and colloidal properties of soils, with emphasis on mineral crystal structure and ion exchange phenomenon. Soil acidity, salt affected soils and their amelioration. Soil and water pollution and abatement principles and wet chemistry principles. Three lectures. Prerequisites: AGSC 2200, CHEM 1110 and 1120.

AGSC 3230 Soil Morphology and Classification (4). An introductory study of the principles of soil classification and land judging. Required of majors in Agronomy. Three lectures and one laboratory period per week. Prerequisites: AGSC 1200 and 2200.

AGSC 3240 Economic Entomology (3). A brief review of the structure, morphology, controls and the recognition of economic insects as related to agriculture. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3250 Farm Weeds and Their Control (3). A course involving the identification, eradication, and economic value of the important weeds of fields and pastures. Elective for any department. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3260 Plant Physiology (3). Application of plant physiological principles to seed plants with special emphasis on photosynthesis, respiration, absorption, transpiration and nutrition. Prerequisites: AGSC 1200 and 3200.

AGSC 3300 Plant Pathology (3). A study of the diseases of the most important agricultural plants in Tennessee and the south. Emphasis on the nature of the disease, recognition and control measures. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3320 Propagation of Horticultural Plants (3). A study of the methods of propagation of horticultural plants including seedage, cuttage, and grafting of both economic and ornamental plants. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3330 Floriculture (3). A course dealing with the principles underlying culture of greenhouse crops, commercial cut flowers, and house plants. Prerequisite: AGSC 1200.

AGSC 3340 Forestry (3). A study of forest conservation and management and the relation of forestry to agriculture, including the influence of the forest on climate, stream flow, and erosion. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3350 Landscape Plants and Design (3). A study of the landscape composition dealing with the designing of small lots, city property, public grounds, and large estates. The use of ornamental plants such as trees, shrubs and flowers and their identification. Prerequisite: AGSC 1200.

AGSC 3400 Animal and Plant Genetics (3). A study of the fundamental laws of heredity and their relation to plants and animals. Two lectures and one laboratory period per week. Prerequisites: AGSC 1200 and 1410.

AGSC 3410 Anatomy and Physiology of Domestic Animals (3). Review of the structure and function of body systems of domestic livestock. Relationships to animal management practices and animal health considerations emphasized. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.

AGSC 3420 Feeds and Ration Formulation (3). A study of the basic principles of feeding farm animals, feeding standards, balanced rations, composition and nutritive value of feeds. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.

AGSC 3430 Animal Health and Disease Prevention (3). A study of the causes, symptoms, and treatment of general diseases and parasites of livestock and poultry with special emphasis on prevention of health problems. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.

AGSC 3440 Swine Production and Management (3). A study of the breeding, management, feeding and marketing of swine. Emphasis placed on both purebred and commercial production. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.

AGSC 3450 Beef Production and Management (3). This course includes a study of history, development, and distribution of breeds; management practices of the various production systems; control of diseases and parasites; and feeding practices for commercial and purebred breeding herds. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.

AGSC 3500 Principle of Food Science and Technology (3). Techniques of procurement, processing, packing, preservation and distribution of foods are covered in this class. Mechanization and automation of food handling processes. Nutrient components and organoleptic properties of foods. Regulation of the food industry. Two lectures and one laboratory period per week.

AGSC 3510 Processing Milk and Milk Products (3). A study of the procurement, processing and sale of milk and the bacteriological, chemical, and physical aspects of market milk processing. Two lectures and one laboratory period per week. Prerequisites: CHEM 1110 and 1120.

AGSC 3520 Processing Poultry Products (3). A detailed study of grades and classes of market poultry and eggs; methods of processing, storage, preservation and problems in plant operations. Two lectures and one laboratory period per week. Prerequisite: AGSC 2410.

AGSC 3530 Food Microbiology (3). A study of the microorganisms associated with food products. Subjects include: classes of microorganisms, factors that influence growth of spoilage organism, food hazards and quality assurance, effects of preservation techniques on food-borne organisms, microbiology of preservation techniques on food-borne organisms, and microbiology of fermented food products. Two lectures and two laboratory periods per week. Prerequisite: BIOL 2400.

AGSC 3540 Laboratory Instrumentation (3). Introduction to procedures and techniques commonly utilized in analysis of biological materials. Includes spectroscopy, gas and column chromatography, electrophoresis, etc.

AGSC 3550 Global Positioning Systems (3). Introduction to the principles, technology, and effective use of Global Positioning Systems. This course will present a foundation of navigation and positioning principles, hands-on experience with GPS instrumentation, collection and processing of data, and integration with geospatial information systems. This course is multidisciplinary and is designed for students in any field of study. Prerequisite: AGSC 2040 or equivalent.

AGSC 3560 Spatial Analysis (3). Fundamental concepts and analytical procedures used to abstract and simplify complex systems using geospatial information systems. This course emphasizes geometric, coincidence, and adjacency models as applied to surface analysis, linear analysis, raster analysis, topological overlay, and contiguity analysis. Spatial modeling will be used to describe, simulate, predict, and resolve real-world problems, issues, and systems. Prerequisite: AGSC 2510.

AGSC 3570 Geospatial Metadata (3). Data make up the most expensive component of a GIS and account for billions of dollars of expenditures annually. Metadata is data about data. It documents critical information about the data and the procedures used to create and maintain the data. This course explains metadata and its components, and teaches GIS users the how and why of documenting their data. Methodology and standards will follow the Federal Geographic Data Committee's Content Standard for Digital Geospatial Metadata and will conform to the National Spatial Data Infrastructure. Prerequisite: AGSC 2510.

AGSC 3580 Introduction to GIS for Natural Resources (3). An introductory geospatial information systems course on spatial data development and analysis in the science and management of natural resources. Topics covered include basic data structure, data sources, data collection, data quality, geodesy and map projections, spatial and tabular data analysis, digital elevation data and terrain analyses, cartographic modeling, and cartographic layout. Laboratory exercises provide practical experiences that complement theory covered in lectures. Prerequisite: AGSC 2510.

AGSC 3590 Spatial Landscape Design and Analysis (3). Modern landscape design is a blend of science, art, and technology. Utilizing the spatial tools provided by a GIS brings a new level of visualization and analysis of the landscape environment to the designer. This course introduces students to the principles and concepts of landscape design and analysis, and introduces the tools (CAD, GPS, and GIS) needed for successful landscape development and management. Prerequisites: AGSC 2510, AGSC 3550.

AGSC 3600 Image Analysis and Remote Sensing (3). Satellite imagery and aerial photography are vital tools for GIS developers, analysts, and users. Students will first be introduced to the concepts and methods of imaging, remote sensing, and image analysis. The main focus of this course will then be the manipulation and analysis of images within a GIS. Prerequisites: AGSC 2510.

AGSC 4010 Rural Finance (3). An examination of the rural credit institutions and the role of credit in the development of economics, farmer and consumer organizations. Pre-requisite: AGSC 2010 or instructor's approval.

AGSC 4020 Introduction to Agribusiness Analysis (3). Application of theory to management problems encountered in agribusiness firms, application of quantitative tools to solve problems, economies of size, supply demand relationship, input-output analysis, benefit-cost analysis, and interregional competition. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 4030 Practicum in Agribusiness (4). Approval of instructor. Supervised in-depth specialized practical experience in an agribusiness or working experience in a specialized public organization, agency; or solving problems in the organization and/or operation of agribusiness. Students select a practical problem and recommend solution(s) after analyzing the same. Designed to give students training in problem-solving in a real business environment. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 4040 World Agriculture (3). A study of the role of agriculture in economic development. Survey of lesser developed countries with special emphasis on Africa.

AGSC 4070 Agricultural Special Problems (3). Supervised laboratory or field work research of a problem in agricultural sciences. Written project outline and reports of results required.

AGSC 4080 Experimental Design (3). A review of scientific investigation principles and statistical inference. Subjects include analysis of variance and co-variance, non-parametric and analysis, multiple comparison test and experimental designs. Designs cover all randomized block, balanced block, latin square, factorial, split plot, rectangular lattice and augmented. Greater emphasis placed on logic rather than on mathematics and computer.

AGSC 4090 Community Development (3). An analysis of the meaning, structure and function of community development with emphasis on the factors important in community change is carried out in this class.

AGSC 4100 Organization and Contemporary Issues Facing Agriculture Firms (3). An examination of the organization of agribusiness firms, types of business, advantage and disadvantages of each type, legal considerations, approaches to organizational structure, integration deciding where decisions should be made. Operating a business in a socially conscious environment, social, health, environmental, and global issues affecting agricultural firms and their impact on future of agribusiness. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 4210 Soil Physics (3). A study of the physical properties of soils. Physical makeup, color, structure, thermal relationships, aeration, water movement phenomenon in soils and its relationship to soil nutrient movement/uptake. Three lectures. Prerequisites: AGSC 2200, MATH 1110 and 1120.

AGSC 4220 Advanced Soil Fertility (4). A study dealing with the determination of nutrient deficiencies in soils and plants in rapid methods, recommendations of corrective measures. Two lectures and one laboratory period per week. Prerequisites: AGSC 2200, CHEM 1110 and 1120.

AGSC 4230 Soil and Water Conservation and Management (4). A study of the principles of tillage, drainage, fertilization and rotation practices as they affect the productive capacity of field soils. Three lectures and one laboratory period per week. Prerequisites: AGSC 1200 and 2200.

AGSC 4240 Turf Management (3). This course will deal with establishing lawns, soil preparation, seeding, watering, fertilization, clipping, and general management. Corrective measures in established lawns. Care of golf course greens. Prerequisite: AGSC 1200.

AGSC 4250 Floral Design (3). A course dealing with essentials of flower arrangement. One lecture and two laboratory periods per week. Prerequisite: AGSC 1200.

AGSC 4260 Greenhouse Operation and Management (3). An elementary course of principles involving greenhouse site selection, types of structure, covering materials, heating and cooling systems and cultural practices for producing flowers and ornamental plants. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 4310 Plant Breeding (3). Application of genetic principles to the improvement of economic crop plants; methods and procedures of plant breeding. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 4410 Dairy Production and Management (3). A study of general farm operation, adaptation of the herd to available facilities, factors affecting production, balancing rations for dairy cattle, disease control, principles of modern dairy cattle breeding, arrangement and development of dairy farm buildings. Two lectures and one laboratory period per week. Prerequisites: AGSC 1410 and 3420.

AGSC 4420 Poultry Disease Prevention and Sanitation (3). A course designed to give the major principles underlying sanitation and disease prevention as applied to a poultry farm. Two lectures and one laboratory period per week. Prerequisite: AGSC 2410.

AGSC 4430 Animal Nutrition (3). A study of nutrients: their classification, properties, and functions; their digestion, absorption and cellular metabolism; and their requirements and deficiency symptoms. Prerequisites: AGSC 1410 and 3420 and one semester of organic chemistry.

AGSC 4440 Physiology of Reproduction (3). Fundamental principles of the physiology of reproduction with primary emphasis on farm animals, anatomy of the male and female reproductive tracts; hormones, estrus cycle; fertility and sterility, and manipulation of the reproductive process are covered in this class. Prerequisite: AGSC 1410.

AGSC 4450 Science of Meat (3). The study of the composition, physical, chemical, and nutritional properties of meat and meat products. Biochemical alterations of meat during aging, curing, processing and storage. Prerequisite: AGSC 1410.

AGSC 4460 Food Chemistry (3). The study of the function of food. Subjects include: food constituents-proteins, lipids, carbohydrates, mineral and trace elements, vitamins, enzymes; Effects of processing, storage and preparation. Two lectures and one laboratory period per week. Prerequisites: CHEM 1110 and 1120.

AGSC 4500 Senior Project (3). A course required of all seniors majoring in Agricultural Sciences. A course designed to expose students to basic research skills. Students are required to plan and carry out research in the area of their concentration. They are to design project, select method of investigation, review relevant literature, gather and analyze data, draw conclusions based on the results obtained from data.

AGSC 4510 Geospatial Applications in Pest Management (3). Pests, diseases, and weeds have plagued mankind since the beginning of agriculture. Even with modern equipment and methodology, the impact of pests, diseases, and weeds can be devastating. GIS and spatial analysis offer an essential set of tools for use in pest management. This course introduces students to the concepts of pest management and then presents the geospatial tools needed to effectively and efficiently design, implement, and refine a successful pest management program. Prerequisites: AGSC 2510, AGSC 3550.

AGSC 4520 Spatial Analysis in Biosecurity and Risk Assessment (3). GIS and GPS have become integral parts of hazard and disaster management. Biohazards can arise in many different forms – everything from natural events to acts of terrorism. This course will teach students to identify, map, and analyze biohazards, to assess damage, to develop recovery and mitigation plans, and to accurately monitor and predict biohazard risks. Prerequisites: AGSC 2510, AGSC 3550, AGSC 3560.

AGSC 4530 Spatial Database Design and Management (3). The accuracy and usability of data determine the analysis, output, and cost of any geospatial information system. This course presents the principles and techniques of geodatabase design, editing, and management needed to obtain required functionality from a GIS. Prerequisite: AGSC 2510.

AGSC 4540 Geospatial Information Systems Application and Design (3). Concepts and procedures used to successfully assess needs, evaluate requirements, design, and implement geospatial information systems. Emphasis will be placed on the data and technology needed to produce desired information products, and on cost-benefit analysis and project proposal development. Prerequisite: AGSC 2510.

AGSC 4550 Temporal Analysis of Spatial Information (3). The analysis of events over time can reveal trends that are not detectable in a single 'snapshot' of data. The spread of pests and diseases during a specified period, for example, can allow GIS users to make accurate predictions about future spread and to recommend measures to limit or stop spread. This course will introduce students to the concepts and tools needed to analyze spatial data over time. Upon successful completion of the course, students will have the knowledge and skills needed for temporal analysis of historical data and predictive modeling. Prerequisites: AGSC 2510, AGSC 3560.

AGSC 4560 Practicum in GIS (3). The GIS practicum is designed to expose students to real-world GIS problems that might be encountered in the workplace. Student are assigned specific projects in which their knowledge and skills in GIS will be used to solve a problem. Prerequisites: AGSC 2510, AGSC 3560.

AGSC 4710-4720 Seminar (1-1). A course devoted to discussions of current literature and problems in agricultural sciences. Required of seniors majoring in the department. One hour credit each semester. One lecture.

## DEPARTMENT OF FAMILY AND CONSUMER SCIENCES

Gearldean Johnson, Ed.D., Head

107 Frederick S. Humphries Family and Consumer Sciences  
and Nursing Education Complex  
Telephone 615-963-5601

Faculty: S. Ballard, S. Godwin, R. McDowell, M. Machara, G. Matthews, V. Oates, J. Seo

General Statement: The purpose of the undergraduate program in the Department of Family and Consumer Sciences is to provide both a liberal and specialized education in which the interests and well-being of individuals, family members, and consumers are significant. The program includes study of nutrition, food, health, clothing, textiles, management of resources, design, care and guidance of children, human growth and development throughout the life span, interpersonal relationships, and family relationships, with emphasis on breadth of knowledge and its application to the solution of contemporary human problems.

The unifying focus is on an integrative approach to relationships among individuals, families, and communities and the environments in which they function. The program seeks to a) empower individuals, b) strengthen families, and c) enable communities.

Specifically the mission of the Department of Family and Consumer Sciences is to:

- 1) Prepare individuals from diverse backgrounds, ages, and ethnic groups, including those that may be educationally, economically, and socially disadvantaged, as well as those that may be academically and socially advantaged for (a) leadership roles in professional family and consumer sciences careers; (b) graduate and professional specialization; (c) an improved quality of personal and family life; and (d) leadership in improving the quality of life for families through education, prevention and development.
- 2) Discover new knowledge and extend this knowledge to an increasingly global community.
- 3) Provide service to the community through workshops, presentations, and involvement.

### Accreditation

The Department of Family and Consumer Sciences is accredited by the Council for Accreditation of the American Association of Family and Consumer Sciences. The Didactic Program in Dietetics is developmentally accredited by the Commission on Accreditation/Approval for Dietetics Education of the American Dietetic Association, 216 W. Jackson Blvd., Chicago, IL 60606-6995, 312/899-4876.

### Admission/Retention Requirements

All Family and Consumer Sciences majors must have a “C” or better in all courses in their area of concentration in order to graduate. Students who wish to complete requirements for the ADA developmentally accredited Didactic Program in Dietetics must maintain a 2.75 GPA in the courses required for the concentration. Degree candidates seeking teaching certification in Early Childhood Education and Family and Consumer Sciences Education must meet requirements designed for the Teacher Education Program as below.

#### Teacher Education Admission and Retention Requirements:

Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Director of Student Services and Teacher Education in the second semester of the sophomore year. The student must have earned a cumulative 2.75 GPA, and acceptable scores on the Pre-Professional Skills Test (P-PST), or the Computer Based Test (CBT).

Further clarification of the Teacher Education Program can be found in the College of Education section of this catalog; “Admission, Retention, and Student Teaching Requirements for the Teacher Education Program.” Students are required to complete 9 semester hours of student teaching which includes a dual placement.

Departmental Admission to Upper Level (junior-senior year) in Family and Consumer Sciences/Early Childhood Education Programs

1. GPA of at least 2.0 for FACS majors and 2.75 for Early Childhood Education and Family and Consumer Sciences Education majors.
2. Completed the general education courses.
3. Completed all developmental courses
4. Completed the following major field courses: FACS 1010 and at least one of the following core courses; FASH 1120, DIGN 2010, NUFS 2010 or 2011, and ECFS 1010. Those students who did not transfer are expected to have completed all the FCS core requirements before gaining full admission. If courses are not available at the time of transfer, the student will receive tentative admission with the stipulation that enrollment in these courses are required at the first available time.

### **PROGRAMS**

Students may elect majors or concentrations in the following:

Early Childhood Education (PreK-3 certification)

Family and Consumer Sciences with concentration in one of the following:

Child Development and Family Relations

Design

Fashion Merchandising

Family and Consumer Sciences Education

Foods and Nutrition (Dietetics)

Food Service Management

Family Financial Planning Certification (6 courses)

Upper level students enrolled in any program can elect to complete the courses for the Family Financial Planning Program. The Department offers a Family Financial Planning Program that is designed to prepare professionals in personal financial planning who will have the knowledge and skills necessary to qualify to take Certified Financial Planner Board of Standards, Inc. (CFP Board) exam. Completing the six courses in Family Financial Planning courses at Tennessee State University, receiving a bachelor's degree, passing the CFP exam and gaining the appropriate work experience will lead to the granting of the CFP® certification which is a recognized standard of excellence for personal financial planning. Due to the explosion of a rapidly changing and increasingly complex financial marketplace, families are searching and requesting assistance from financial professionals in managing their income, assets, debts, and much more. Financial service providers have noted this phenomenon and have extended their services to provide comprehensive financial assistance. Financial planners are employed in the marketplace with companies that specialize in retirement, equity trading, insurance, and real estate. In addition; personal financial planners may work as a personal financial counselor in a company or may be self employed.

#### Suggested Four Year Program:

#### Bachelor of Science Degree in Early Childhood Education (With Teacher Certification Pre K-4)

##### FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000, Orientation	1	ART 1010, Art Appreciation	3
ENGL 1010, Freshman English	3	ENGL 1020, Freshman English II	3
ECFS 1010, Intro Early Child/ Child Dev	3	MATH 1110, College Algebra	3
GEOG 1010 or 1020, World Geography	3	FACS 1010, FCS as a Profession	1
General Ed Natural Science: BIOL 1010, 1011, or ASTR 1010	4	General Ed Natural Science: BIOL 1020, 1021, or ASTR 1010	4
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##### SOPHOMORE YEAR

ENGL 2010-2024, Soph Lit.	3	MATH 1410, Struc. Number Sys	3
HIST 2010 or 2020, Am. History	3		
ECFS 2010, Prin & Concepts Child Dev	3	ECFS 3020, Middle Childhood	3
EDCI 2010, History/Found Ed.	3	HIST 2030 History of Tennessee	3
PSYC 2010, Gen. Psychology or app. Gen. Ed/Social Science	3	COMM 2200, Public Speaking	3
	—	MUSC 1010, Music Appreciation	3
	15	ECFS 3320, Expressive Arts for Young Child	3

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##### JUNIOR YEAR

ENGL 3730, Children's Literature	3	EDRD 3500, Literacy I	3
PSYC 3120, Meas/Eval/Clrm Pub Sch	3	ECFS 4600, Methods & Materials in Early Childhood	3
EDSE 3330, Ed. of Exceptional Children	3		
ECFS 3610, Early Childhood Curriculum	3	ECFS 3520, Observ./Participation/ Assessment in ECFS	3
NUFS 3330, Maternal & Child Nutrition	3	EDCI 3500, Principles of Curr. and Instruction	3
	—	EDCI 2200, Field Study	2
	15	ECFS 4000, Behavior Mgmt Young Children	3
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## SENIOR YEAR

ECFS 4650, Parent./Prac. Steps	3	ECFS 4720, Student Teaching	9
		EDCI 4706, Educational Seminar	3
EDCI 4620, Field Experience	3		
EDCI 4500, Methods for Teach. the Elem.Students	3		
FACS 4500, Senior Project	3		
EDRD 4500, Literacy II	3		
ECFS 4630, Family Relationships	3		
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### Suggested Four Year Program:

## Bachelor of Science Degree in Family and Consumer Sciences Concentration in Child Development and Family Relations

## FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000, Orientation	1	ART 1010, Art Appreciation	3
ENGL 1010, Freshman English	3	ENGL 1020, Freshman English II	3
ECFS 1010, Intro Early Child/ Child Dev	3	MATH 1110, College Algebra	3
FACS 1010, FCS as a Profession	1	GEOG 1010 or 1020, World Geography	3
BIOL 1010, 1011, Biophysical Sci. or General Educ natural science	4	BIOL 1020 or 1021, Biophysical Sc or general educ natural science	4
MUSC 1010, Music Appreciation	3		
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## SOPHOMORE YEAR

ENGL 2010-2024, Soph Lit.	3		
HIST 2010 or 2020, Am. History	3	COMM 2200, Public Speaking	3
ECFS 2010, Child Growth & Development	3	HIST 2020, American History	3
DIGN 2010, Environ. Design or FASH 1120, Cultural Interpre.	3	EDCI 2010, Hist/Found of Ed.	3
SOCI 2010, Intro to Sociology	3	ECFS 3320, Expressive Arts	3
		ECFS 3020, Middle Childhood and Adolescence	3
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## JUNIOR YEAR

ECFS 4520, Early Child. Adm & Leadership	3	ENGL 3730, Children's Lit	3
ECFS 3610, Early Child. Curr.	3	ECFS 3520, Observ/Part/Assess. in ECFS	3
EDSE 3330, Educ. Except. Child	3	ECFS 3530, Infant Clinic	3
FERM 3210, Family Resource Mgmt. or FERM 4330, Consumer Ed.	3	ECFS 4630, Family Relations	3
NUFS 3330, Mat. Child Nutrition	3	ECFS 4600, Meth & Mat in Early Childhood	3
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## SENIOR YEAR

ECFS 4650, Parenting/Practical Steps	3	ECFS 4660, Internship	9
ECFS 4000, Behavior Manage- ment and Guidance	3	SOWK 4700, Gerontological Soc Work	3
PSYC 3120, Meas/Eval/Cirm Pub Sch or PSYC 2180, Elem Statistics	3		
ELECTIVES (3000-4000 level)	2		
FACS 4500, Senior Project	3		
ECFS 4620, Current Trends	3		



<del>FACS 4700, Seminar in FCS</del>	<del>1</del>
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#### Suggested Four Year Program:

### Bachelor of Science Degree in Family and Consumer Sciences Concentration in Design

#### FRESHMAN YEAR

##### FALL SEMESTER

SAHE 1000, Orientation	1
ENGL 1010, Freshman English	3
FASH 1110, Textiles	3
DIGN 2010, Environmental Design	3
CHEM 1010, 1011, Gen. Chem. or Gen. education natural science	4
FACS 1010, FCS as a Profession	1
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##### SPRING SEMESTER

ART 1010, Art Appreciation	3
ENGL 1020, Freshman English II	3
MATH 1110, College Algebra	3
CHEM 1020, 1021 Gen. Chem. or General educ science course	4
THTR 1020, Apprec. of Drama	3
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#### SOPHOMORE YEAR

ENGL 2010-2024, Soph. Lit.	3
HIST 2010, Am. History	3
FASH 2030, History of Costume	3
DIGN 3000, Fashion Illustration	3
NUFS 2110, Nutrition or NUFS 2010 Basic Nutrition	3
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FASH 2110, Prin of Apparel Const	3
Social Science Elective	3
HIST 2020, American History	3
COMM 2200, Public Speaking	3
ECON 2010, Economic Prin.	3
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#### JUNIOR YEAR

FACS 3730, Entrepreneurship	3
DIGN 3100, Int/Fash/Text CAD	3
FASH 4130 or 3220, Dress Design or THTR 4000 or 4020, Scene Design	3
DIGN 3500, Studio Design or DIGN 3400, Presentation Techniques	2
DIGN 3230, Space Planning	3
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DIGN 3010, Cost./Fash. Design	3
DIGN 4110, Non-residential Design	3
DIGN 4350*, Internship	6
ECFS 4630, Family Relations	3
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\*Summer Only

#### SENIOR YEAR

DIGN 4120, Furniture Design	3
<del>FACS 4700, Seminar in FCS</del>	<del>3</del>
DIGN 3005, Drafting of Interiors	3
FACS 4500, Senior Project	3
ELECTIVE	3
FERM 4330, Consumer Ed.	3
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DIGN 4000, History of Interiors	3
DIGN 4210 Interior Architecture	3
DIGN 4200, Exper. Tex/Arch	3
ELECTIVES (3000 or 4000 level)	6
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#### Suggested Four Year Program:

### Bachelor of Science Degree in Family and Consumer Sciences Concentration in Fashion Merchandising

#### FRESHMAN YEAR

##### FALL SEMESTER

SAHE 1000, Orientation	1
ENGL 1010, Freshman English	3

##### SPRING SEMESTER

NUFS 2110, Nutrition	3
ENGL 1020, Freshman Eng. II	3

FASH 1110, Textiles	3	FASH 1120, Cultural Interpre.	3
MATH 1110, College Algebra	3	FACS 1010, FCS as a Profess.	1
ART 1010, Art Appreciation	3	HIST 2020, American History	3
HIST 2010, American History	3	Humanities Elective	3
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#### SOPHOMORE YEAR

ECON 2010, Prin. of Econom. I	3	FASH 2110, Prin of Apparel Const	3
DIGN 2010, Environ. Design	3	CHEM 1020, 1021, Gen Chem. or	
CHEM 1010, 1011, Gen. Chem. or		General education natural	
General education natural		science course	4
science course	4	COMM 2200, Public Speaking	3
FASH 2030, History of Costume	3	ENGL 2010-2024, Soph. Lit.	3
ACCT 2010, Prin. of Accounting	3	ECON 2020, Prin of Economics II	3
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#### JUNIOR YEAR

DIGN 3100, Inter, Fash.,		ECFS 4630, Family Relations	3
Textile CAD	3	MKTG 3010, Basic Marketing	3
DIGN 3000, Fashion Illustration	3	FERM 4330, Consumer Ed or	
FASH 3000, Apparel Quality	3	FERM 3210, Family Resource	
DIGN 3230, Space Planning	3	Mgmt	3
FACS 3730, Entrepreneurship		FASH 4150*, Internship	6
in Family & Consumer Sci	3		
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\*Summer Only

#### SENIOR YEAR

FASH 4030, Clothing Economics	3	ELECTIVE (3000-4000 level)	5
MKTG 3200, Sales Management	3		
FASH 4000, Display Merch.	3	MKTG 4250, Retailing Mgmt	3
FACS 4500, Senior Project	3	FASH 4140, Fashion Merch.	3
		FASH 4440, Fashion Promo.	3
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Suggested Four Year Program:

Bachelor of Science Degree in  
Family and Consumer Sciences  
Concentration in Food Service Management

#### FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000, Orientation	1	ENGL 1020, Freshman English	3
ENGL 1010, Freshman English	3	HUMANITIES ELECTIVE	6
MATH 1110, College Algebra	3	HIST 2020, American History	3
HIST 2010, American History	3	COMM 2200, Public Speaking	3
NUFS 1110, Food Principles	4	FACS 1010, FCS as a Profession	1
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#### SOPHOMORE YEAR

CHEM 1010,1011, Gen. Chem. or		CHEM 1020 & 1021, Gen. Chem. or	
Gen. education natural science	4	Gen. education natural science	4
ENGL 2010-2024, Soph Lit.	3	ECON 2020, Economic Prin. II	3
NUFS 2010, Nutrition	3	ACCT 2010, Prin. of Acctg. I	3
ECON 2010, Economic Prin. I	3	HUMANITIES ELECTIVE	3
DIGN 2010, Environ. Design	3		
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**JUNIOR YEAR**

NUFS 3120, Nutri./Global Com.	3	NUFS 3110, Food Science	3
BIOL 2400 Bacteriology	4	MGMT 3010, Man. Organization	3
ACCT 2020, Prin. of Acct. II	3	ELECTIVE 3000 or 4000 level	3
NUFS 3130, Foodservice Equip.	3	ECFS 4630, Fam. Relationships	3
MKTG 3010, Basic Marketing	3	NUFS 4120, Quan. Foods Proc.	3
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**SENIOR YEAR**

FERM 4330, Consumer Ed.	3	FACS 4500, Senior Project	3
NUFS 4520, Food Service Sys.	3	FACS 4600*, Field Experiences	6
BLAW 3000, Legal Envir/Bus.	3	FACS 3730, Entrepreneurship	3
ELECTIVES (3000-4000 level)	6	NUFS 4620, Special Problems	3
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\*Summer Only

**Suggested Four Year Program:**

**Bachelor of Science Degree in  
Family and Consumer Sciences  
Concentration in Foods and Nutrition**

**FRESHMAN YEAR****FALL SEMESTER**

SAHE 1000, Orientation	1
ENGL 1010, Freshman English	3
HIST 2010, American History	3
MATH 1110, College Algebra	3
DIGN 2010, Environ. Design	3
NUFS 1110, Food Principles	4
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**SPRING SEMESTER**

ENGL 1020, Freshman English	3
HIST 2020, American History	3
CHEM 1010, 1011 Gen Chem.	4
HUMANITIES ELECTIVE	3
FACS 1010, FCS as a Profess.	1
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**SOPHOMORE YEAR**

ENGL 2010-2018, Literature	3	BIOL 2220, 2221, Human Anat. or	
CHEM 1020 & 1021, Gen. Chem.	4	ELECTIVES*	4
BIOL 2210, 2211, Human Anat.	4	ECON 2010, Economic Prin.	3
PSYC 2010, General Psychology	3	HUMANITIES ELECTIVES	3
		NUFS 2110, Nutrition	3
		COMM 2200, Public Speaking	3
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**JUNIOR YEAR**

PSYC 2180 or ELECTIVE*	3	ELECTIVE (3000-4000 level) or	
NUFS 3120, Nutri./Global Com.	3	CHEM 3410 & 3411* Phys Chem.	4
CHEM 2010, 2011, Org. Chem.	4	BIOL 2400, Gen Bacteriology	4
MGMT 3010, Manage. & Org.	3	NUFS 4120, Quan. Foods Proc	3
NUFS 3130 Fd Ser Equip & Cost Control	3	NUFS 3110, Food Science	3
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**SENIOR YEAR**

FACS 4500, Senior Project	3	FACS 4600**, Field Experiences	2
NUFS 4110, Advanced Nutrition	3		
NUFS 4520, Food Serv. Systems	3	ECFS 4630, Fam. Relationships	3

NUFS 3330, Mat./Child Nutrition	3	ELECTIVES* (3000-4000 level or	
FERM 4330, Consumer Ed.	3	NUFS 4530, Medical Ntr + 2 hrs)	6
		FACS 3710, Teaching FCS	3
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\*Students wishing to meet requirements for the Dietetics Program must replace electives with the following courses: PSYC 2180, CHEM 3410 and lab, NUFS 4530, and BIOI 2220, 2221

\*\*Summer Only

### Suggested Four Year Program:

## Bachelor of Science Degree in Family and Consumer Sciences Concentration in Family and Consumer Sciences Education (With or Without Teacher Certification)

### FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 1000, Orientation	1	CHEM 1020, 1021, Gen Chem.	4
ENGL 1010, Freshman English	3	ENGL 1020, Fresh. English II	3
CHEM 1010, 1011, Gen. Chem.	4	MATH 1110, College Algebra	3
FASH 1110, Textiles	3	FACS 1010**, FCS as a Profess.	1
NUFS 1110, Food Principles	4	HUMANITIES ELECTIVE	3
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### SOPHOMORE YEAR

ENGL 2010-2024, Soph Lit.	3	HUMANITIES ELECTIVE	3
HIST 2010 or 2020, Amer. Hist.	3	COMM 2200, Public Speaking	3
DIGN 2010, Environ. Design	3	HIST 2020, American History	3
PSYC 2420, Human Growth & Dev	3	EDCI 2010, History/Foundation of	
NUFS 2110, Nutrition or		Education	3
NUFS 2010, Basic Nutrition	3	SOC SCI ELECTIVE	3
ECON 2010, Prin. of Econ. I	3		
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### JUNIOR YEAR

EDSE 3330*, Educ Except Child.	3	FASH 2110, Prin. Apparel Con	3
FACS 3870**, Curr./Pro Dev		FERM 3210, Fam. Resource Mgt	3
in FCS	3	FACS 3710, Teaching FCS	3
DIGN 3230, Space Planning	3	PSYC 3120*, Meas/Eval Pub	
NUFS 3110 or NUFS 3120,		School	3
Food Science	3	ECFS 4630, Family Relations	3
ECFS 2010, Prin./Concepts of		FACS 4430**, Prin. of Voc. Ed. &	
Child Development	3	Occup.	3
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### SENIOR YEAR

ECFS 4650, Parent./Prac. Steps	3	FACS 3720, Spe. Prob in FCS or	
FERM 4330, Consumer Ed.	3	EDCI 4705* Educational Sem.	3
FACS 4500, Senior Project	3	FACS 4720*, Student Teach. or	
EDRD 4910*, Teaching Reading	3	FACS 4740, Field Experiences	9
EDCI 3110, Classroom Behavior	3		
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	15		12

\*Family and Consumer Sciences and Family and Consumer Sciences Education courses will be substituted for those interested in Family and Consumer Sciences Education without certification. Admission to Student Teaching required for enrollment in these courses.

### Curriculum for Occupational Family and Consumer Sciences Endorsement

Family and Consumer Sciences Education majors who complete or are working on teacher certification in Consumer and Homemaking (Vocational Home Economics) may take additional courses to add one or both of the two endorsement areas in vocational home economics.

Occupational Endorsements 11 Semester Hours

Option I

Food Management, Production, and Service	11
FACS 4600	2
NUFS 3130, 4120	6
NUFS 4520	3

Option II

Care and Guidance of Children	11
FACS 4580	2
ECFS 3320	3
ECFS 4520, 4600	6

## COURSE DESCRIPTIONS

### Design (DIGN)

DIGN 2010 Environmental Design (3). A course in which students develop techniques for becoming aware of design in the near environment. Students learn to solve creative problems, varied materials and techniques in design and color with emphasis on the element and principles of art as applied to the home and individuals. They also examine two and three dimensional forms in design. Lab-lecture. Fall Semester

DIGN 3000 Fashion Illustration (3). A course in which students learn how to sketch human figures and use fashion illustration as a form of communication. Emphasis on color, proportion, fabric detail, development of individual techniques and development of individual techniques and experimentation with a variety of media. Lab-lecture. Prerequisite: DIGN 2010. Fall Semester: Odd Years

DIGN 3005 Drafting of Interiors (3). A course which emphasizes interior residential design and students learn techniques for 2-D manual drafting, including lettering, floor plans, elevations, detailing, isometrics and perspective. Prerequisite: DIGN 2010 or consent of instructor. Fall Semester

DIGN 3010 Costume/Fashion Design (3). A course in which students learn how to make rendering and layouts and make costume and fashion analysis for the individual and theatre. They learn fashion fundamentals such as application of the fashion tools, fashion makers, responsibilities of designers, creative use of research, inspirational museums and library sources. Studio problems with emphasis on live color and texture for the individual and costumes are emphasized. Lab-lecture. Prerequisite: DIGN 2010, FASH 2030. Spring Semester

DIGN 3100 Interior, Fashion & Textile CAD (3). An introduction to the use of computers in interior, fashion, and textile design. Various computer programs are used for developing interior drawings, fashion designs, and textile design.

DIGN 3230 Space Planning (3). An introductory course in the interior design profession in which students apply the design elements and principles to interior design. Studio problems in designing living spaces for family living. Lab-lecture. Prerequisite: DIGN 2010. Fall Semester

DIGN 3400 Presentation Techniques (2). In this course students will gain knowledge and experience in portfolio development and presentation skills. Emphasis is placed on writing and vocalizing design concepts and the design process, developing presentation drawings, renderings and boards. Prerequisite: DIGN 2010. Fall Semester

DIGN 3500 Studio Design Laboratory (2). —A course designed for students who wish to experiment with art studio problems, related art problems, design inspiration and media with guidance of instructor. Prerequisite: DIGN 2010. Fall Semester

DIGN 4000 History of Interiors (3). A course which includes a study of the historical and contemporary interiors, traditional and modern, classic Asian, European and current influences, and contemporary. Spring Semester

**Design 4110 Non-residential Design (3).** A studio course in which students utilize the design process in the analysis and planning of non residential interior environments such as healthcare, restaurant, preschool, and retail facilities. The course includes a study of current codes relating to health, safety, and handicapped accessibility in non residential design. Prerequisite: DIGN 2010 and 3230 or consent of instructor.

**DIGN 4120 Furniture Design and Decorative Finishes (3).** A course in which students design and execute art crafts using inexpensive materials and tools. The content of the course includes: relationship of design to function, materials, tools and techniques; understanding educational, economic, social, recreational and therapeutic art craft work. Emphasis is placed on making creative objects of original design. Lab-lecture. Fall Semester: Even Years

**DIGN 4200 Experimental Textile, Apparel and Design (3).** A course which covers creative and technical aspects of designing textiles, apparel, accessories, and home fashions. Original designs with exercises in various media, direct, indirect and accidental methods will be used to stimulate ideas and involve the students in the process of exploring and awakening intellectual and creative potentials. Lab-lecture. Prerequisite: DIGN 2010 or consent of instructor. Spring Semester

**DIGN 4210 Interior Architecture (3).** A course whose major topics for this course are: problems in designing for living; integration of structural concepts; design in relation to site, house and interior environment; selection and coordination of furniture, fabrics, materials, accessories in interior space laboratory. Lab-lecture. Prerequisites: DIGN 2010 & 3230. Spring Semester

**DIGN 4350 Internship/Seminar/Options (3-6).** A course in which students gain experience in established firms, institutions, showrooms, etc. Students are introduced to many practical applications of design theory directed toward various aspects of the fashion, interior, visual and fabric structure and decoration industry as well as specialized teaching. Each option is to be executed under the supervision of the concentration coordinator. Senior standing in curriculum required. Summer Semester.

#### Early Childhood, Child Development, and Family Relationships (ECFS)

**ECFS 1010 Introduction to Early Childhood & Child Development (3).** A study of staff roles in a variety of pre-school programs for children in Middle Tennessee. The first half of the semester will be spent in observation, the second in a practicum as an aide functioning in a variety of roles. Fall Semester

**ECFS 1660 (CDA) Observations and Internship (2).** A course which provides opportunities for observation and practice work in pre-school programs for young children. Consent of instructor.

**ECFS 2010 Principles and Concepts of Child Development (3).** A study of the basic principles and concepts of growth and development which serve as a foundation in understanding children from birth to age 8. Observation and laboratory experiences are required.

**ECFS 2110 (CDA) Problems in CDA Competency Area I (3).** An individualized study for early childhood care givers in setting up and maintaining safe and healthy learning environments for young children. This course must be taken in conjunction with ECFS 2120 or with consent of instructor.

**ECFS 2120 (CDA) Practicum: Safe, Healthy Learning Environments (3).** A course in which the care givers demonstrate the ability to set up and maintain safe and healthy learning environments for young children. Consent of instructor.

**ECFS 2210 (CDA) Problems in CDA Competency Area 2 (3).** An individualized study for care givers in learning to advance the physical and intellectual development of young children. Consent of instructor.

**ECFS 2220 (CDA) Practicum: Physical and Intellectual Competency (3).** A course in which the care givers demonstrate the ability to advance the physical and intellectual development of young children. Consent of instructor.

**ECFS 2310 (CDA) Problems in CDA Competency Area 3 (3).** An individualized study for care givers that focus on building positive self-concept and individual strength in young children. Must be taken in conjunction with ECFS 2320 or with consent of instructor.

**ECFS 2325 (CDA) Art for Young Children (2).** (Formerly ECCD 232A) A course that includes a study of self-directed activities in art and creative play experiences.

**ECFS 2320 (CDA) Self Concept and Individual Strength (3).** A course in which care givers demonstrate the ability to build positive self-concept and individual strength in young children. Consent of instructor.

ECFS 2410 (CDA) Problems in CDA Competency Area 4 (3). An individualized study course for care givers in organizing and sustaining the positive functioning of young children and adults in groups in a learning environment. Must be taken in conjunction with ECFS 2420 or with consent of instructor.

ECFS 2420 (CDA) Practicum: Positive Functioning of Children and Adults in a Group (3). -A course in which the care givers demonstrate the ability to organize and sustain the positive functioning of young children and adults in a group learning environment. Consent of instructor.

ECFS 2515 (CDA) The Young Child (3). A contemporary modularized course of instruction designed to familiarize students with the philosophy and basics of child development and to increase their competencies in working with children. Outside experiences, guest lectures, and multi-media approaches are arranged.

ECFS 2510 (CDA) Problems in CDA Competency Areas 5 and 6 (3). An individualized study course for care givers in coordinating home and center and carrying out supplementary responsibilities. Must be in conjunction with ECFS 2520 or with consent of instructor.

ECFS 2525 (CDA) Observation (3). A course in which students observe in nursery school, kindergarten, and other preschool programs for young children.

ECFS 2520 (CDA) Practicum: Home, Center and Supplementary Responsibilities (3). A course in which care givers demonstrate the ability to establish positive and productive relationships with parents and encourage parents to participate in the center's activities, policies, and rules. Consent of instructor.

ECFS 2535 (CDA) Internship in Infant Programs (2). A course in which students observe and participate in infant laboratories.

ECFS 2530-2540-2550 (CDA) Problems in Providing Care for Young Children (3). An individualized experience for early childhood care givers. Consent of instructor.

ECFS 2660 (CDA) Internship in Early Childhood and Child Development (3). A course in which students participate in field work in community nursery schools and other preschool programs for young children. Consent of instructor.

ECFS 3020 Middle Childhood and Adolescence (3). A course in which students study human development from later pre-school through adolescence (5-18) years. Prerequisite: ECFS 2010

ECFS 3310-3330-3340 (CDA) Internships for Trainers (3). An individualized internship experience for persons interested in providing child care giver training. Consent of instructor.

ECFS 3320 Expressive Arts for Young Children (3). A course in which students interpret and are involved with (1) art learning activities, (2) self-directed activities, and (3) integrated activities with emphasis on the role of creative play. Prerequisites: ECFS 2010 or ECFS 3510. Spring Semester

ECFS 3520 Observation, Participation and Assessment in Early Childhood Settings (3). Observation and participation in early childhood settings. A course required of students concentrating in Child Development and Family Relationships. This course will address appropriate observation methods and assessment tools for use in early childhood settings. Laboratory experiences required. Prerequisites: ECFS 2010 or ECFS 3510. Spring Semester

ECFS 3530 Infant Clinic (3). A course designed to address the human development process from birth to 2 years of age and the relative influences of the environment on socialization. Emphasis is placed on the various theories and curricula being followed in quality day-care programs for infants. Observation/participation in infant programs required.

ECFS 3610 Early Childhood Curriculum I (3). A course in which students design curricula in Early Childhood Education, including learning how to write general goals and behavioral objectives for lesson plans, and discussing forces that affect curriculum. Prerequisites: observation in a variety of early childhood settings, ECFS 2010 or ECFS 3510. Fall Semester

ECFS 4000 Behavior Management and Guidance (3). This course examines positive guidance strategies for children from birth to eight years. Students will explore theoretical foundations related to child development and the implementation of various models to foster self-control, organize the classroom environment and curriculum for pro-social skills, methods for addressing persistent and challenging behaviors. Emphasis will be on behavior management and on guidance strategies for preschool and early elementary children. The course will also explore a wide variety of issues in relation to parenting, child-rearing practices, and child-family relations. Required field experience.

ECFS 4520 Early Childhood Administration and Leadership (3). A course designed to familiarize students with the operational procedures of day care programs. Emphasis is placed on providing students with practicum experience relating to administering and supervising personnel, managing budgets, and developing computer programs. Observation/participation in Early Learning Center required. Fall Semester

ECFS 4600 Preschool and Kindergarten Methods and Materials (3). A study of methods, materials and modern trends of teaching in the nursery school and kindergarten. Organization, equipment, and housing in child care centers and public kindergartens are studied based on the developmental levels of children. Observation/ participation experiences in early childhood programs required. Prerequisite: ECFS 3320 and ECFS 3610 Spring Semester

ECFS 4620 Current Topics and Issues in Early Childhood Education (3). A course in which students study programs, trends and issues in child development and early education.

ECFS 4630 Family Relationships (3). (Formerly ECCD 463) A study of modern family life, giving special emphasis to the needs and activities of individuals as they relate to the development of the family throughout the life cycle. Spring Semester

ECFS 4650 Parenting/Practical Steps to Childrearing (3). A course in which students outline and examine contemporary problems of childrearing and focus on systematic and scientific methods of parenting. Subject areas to be examined are child abuse, socialization practices among various cultures, myths and misconceptions about effectiveness of punishment, the rights of children, principles of behavioral modification and parents of children with special needs. Fall Semester

ECFS 4660 Internship or Fieldwork in Child Development (9). A course in which students are provided an opportunity to student teach in the campus Early Learning Center. Taken with approval of the coordinator of Child Development and Family Relationships.

ECFS 4720 Observation and Student Teaching in Pre-K and K-3 (12). Supervised teaching experiences in both Pre-K and K-3 settings on a full-time basis for a semester. Seminars are integral parts of the student teaching experience. Prerequisite: This course is open only to students who have met the student teaching prerequisites.

#### Family and Consumer Sciences Education (FACS)

FACS 1010 Family and Consumer Sciences as a Profession (1). A course designed to help students identify their goals and individual needs and explore possible family and consumer sciences career areas. Students gain knowledge of the history and philosophy of family and consumer sciences as well as public policy and issues and trends. One lecture.

FACS 3180 Cooperative Education (3). A university-wide program that combines academic study with meaningful work experiences directly related to the student's academic major. Students are required to work at least two semesters with a school semester in between (work/study/work). Three hours of academic credit will be awarded for the co-op work experience.

FACS 3710 Teaching Family and Consumer Sciences (3). A course designed for students preparing to teach family and consumer sciences in middle and secondary schools as well as for family and consumer sciences in the fields of business, social welfare, extension, public utilities, dietetics and nutrition. Students are provided opportunities to develop instructional plans including using instructional techniques and methods and selecting and using media as well as computers. Supervised field experiences in middle and high schools required for Teacher Education Students. Other field teaching experiences required for all students. Prerequisite: Admission to Teacher Education Program for students in Teacher Education. Spring Semester

FACS 3720 Special Problems in Family and Consumer Sciences (1-3). A course designed for individual and group projects that focus on recent research findings and general depth in subject matter.

FACS 3730 Entrepreneurship in Family and Consumer Sciences (3). A course that focuses on the application of knowledge to teaching entrepreneurship skills in family and consumer sciences programs and/or developing plans to become an entrepreneur using family and consumer sciences skills.

FACS 3870 Curriculum and Program Development (3). A course where attention is given to family and consumer sciences curriculum conceptualization including analyzing factors impacting on the curriculum. Students plan and develop family and consumer sciences programs, and analyze teacher roles and communication in the classroom. Professional rights and responsibilities, and multi-cultural/global education are analyzed. Supervised field experiences in middle and high schools are required. Prerequisite: Admission to the Teacher Education Program. Fall Semester, even numbered years.



FACS 4430 Principles of Career Technical and Occupational Program Planning (3). A course which focuses on theory, philosophy, legislative and historical background, and program development in vocational education with special emphasis on program planning in family and consumer sciences related occupation (HERO). Emphasis is also given to implementing cooperative experiences, job placement and follow-up, public relations, advisory committees, evaluation and youth leadership. Supervised observation-participation experiences in vocational programs are required. Fall Semester, odd years.

FACS 4500 Senior Project Writing (3). A course in which students develop skills related to techniques of professional writing, literature searching, and abstracting scientific material. Students will incorporate area-special concepts into an original project with an accompanying written component. Senior standing in curriculum required.

FACS 4580 Field Experiences in Child Care Services (2). A supervised work experience in the child care industry. Course includes class seminars. Senior standing in curriculum required. Summer Session

FACS 4600 Field Experiences in Food Service or Nutrition (2-6). A supervised work experience in the food service industry or in nutrition programs. Course includes class seminar. Senior standing in curriculum required. Summer Session

FACS 4720 Student Teaching in Family and Consumer Sciences (12). Supervised teaching in family and consumer sciences in off-campus teaching centers on a full-time basis for a semester (15 weeks) in both a middle school and a high school. Seminars are integral parts of the student teaching experience. Prerequisite: This course is open only to students who have met the student teaching prerequisites for Family and Consumer Sciences and Teacher Education.

FACS 4740 Consumer and Family Service Field Experiences (3-6). A course designed to provide students opportunities to gain practical experiences in consumer and family service programs. Students not seeking teaching certification should substitute this course for student teaching. Prerequisites: Senior level Family and Consumer Sciences major and consent of instructor.

#### Fashion Merchandising (FASH)

FASH 1110 Textiles (3). A consumer-oriented study of textiles, emphasizing fibers, yarns, fabric construction, finishes and socio-economic background of the textiles and apparel industry in relation to end use. Lecture-laboratory. Spring Semester

FASH 1120 Cultural Interpretation of Dress (3). A study of the dynamic nature of the fashion phenomenon within the global society. Theories regarding psychological, social, cultural and economic forces of acquiring new styles will be explored. Learn about fashionable apparel worn in various cultures. Spring Semester

FASH 2030 History of Costume (3). The history of costume from ancient times to the present and the influence of social and economic conditions upon costume are covered in this course. Fall Semester

FASH 2110 Principles of Apparel Construction (3). Students learn the fundamental techniques of sewing various apparel by using a computerized, industrial sewing machine, or serger. Simple pattern alterations will be implemented. Lecture-laboratory. Fall Semester

FASH 3000 Apparel Quality Analysis (3). A study of various techniques of evaluating silhouettes, and structural and decorative details of apparel. The degree of excellence displayed in construction will be examined. Prerequisites: FASH 2110 and DIGN 3010. Spring Semester

FASH 3120 Applied Dress Design (3). The application of elements and principles of design as they relate to clothing. Emphasis is placed upon problem solving and the functional, structural and decorative aspects of apparel design. Prerequisites: FASH 2110 and DIGN 3010. Spring Semester: Even Years

FASH 3210 Tailoring (3). A course in which students learn advanced construction methods. Students construct a tailored garment. Emphasis is also placed on selection and care of woolen garments. Prerequisite: examination in construction skills and/or FASH 2110. Fall Semester: Odd Years

FASH 3220 Flat Pattern Adaptation (3). A study of the principles and techniques of flat pattern design and application of these principles to commercial pattern alteration. The development of original designs is emphasized. Prerequisite: FASH 2110. Spring: Odd Years

FASH 4000 Display Merchandising (3). Presentation of merchandise, coordination elements and principles of design, properties and the art of arranging soft goods through a visual medium. Concepts and tools of selling merchandise in numerous retail settings for increasing sales are covered.

FASH 4030 Clothing Economics (3). A study of clothing as it relates to the consumer of clothing and textiles. Emphasis is placed on changing needs and desires, trends in clothing expenditures, legislation and care. Spring Semester

FASH 4130 Dress Design and Draping (3). A course in dress design with emphasis on originality and draping. Opportunity is given to students to investigate sources of design and to practice various methods of designing. Prerequisite: FASH 2110 & DIGN 2010. One lecture and two laboratory periods. Fall: Even Years

FASH 4140 Fashion Merchandising Seminar (3). A study of the problems in various aspects of buying fashions. Emphasis is on the planning involved in marketing of merchandise and computer applications in retailing. Spring Semester

FASH 4150 Internship (3-6). A temporary period of supervised work experience which provides the student an opportunity to apply theoretical knowledge to a work situation. Internship is designed to give students supervised work experience in an area of fashion merchandising. Prerequisites: (1) junior level or above in Family and Consumer Sciences, (2) a job in clothing and/or textiles retailing or merchandising, and (3) instructor's written approval. Summer Sessions

FASH 4440 Fashion Promotions and Events (3). Students learn to incorporate numerous elements of selling into a theatrical presentation using live models. Stages of planning fashion promotions by establishing the type of show, site, theme, budget, publicity, advertising and various press materials for producing a fashion show are implemented into an annual presentation. Students produce a major fashion show.

#### Family Economics and Resource Management (FERM)

FERM 3210 Family Resource Management (3). A course which includes a study of the family as an ecosystem and how that ecosystem is influenced by and influences other larger systems. Attention is given to the problems faced by individuals and families in managing resources. The management process is viewed within an environmental context. Offered each Spring Semester

FERM 3500, Fundamentals of Family Financial Planning (3). This course introduces students to various financial planning topics that face families such as the financial planning process, client/planner interactions, time value of money applications, personal financial statements, cash flow and debt management, asset acquisition, and education planning. Risk management, investment planning, retirement planning, plan integration and ethics are also discussed. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate

FERM 3600, Insurance Planning for Families (3). This course introduces students to risk management and insurance decisions in personal financial planning. Topics include insurance for life, health, disability, property and liability risks, as well as annuities, group insurance, and long term care. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate

FERM 3700, Investment Planning For Families (3). This course provides the student with an understanding of the various types of securities traded in financial markets, investment theory and practice, portfolio construction and management, and investment strategies and tactics to meet a family's investment goals. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate.

FERM 4100, Income Tax for Families (3). The course provides an overview of current tax law, income tax principles, taxation terminology. The course focuses on tax planning considerations, computations, and tax planning strategies including tax pitfalls that impact financial planning for families. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate.

FERM 4200, Retirement Planning for Families (3). The intent of the retirement planning course is to provide individuals with knowledge of both public and private retirement plans. The public plans include Social Security, Medicare, and Medicaid. The private plans include defined benefit and defined contribution plans and their regulatory provisions. The specifics of the various plans are analyzed as well as non-qualified deferred compensation plans. Finally, issues that individuals face in retirement, such as life-styles choices and medical issues are discussed.

This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate.

FERM 4300, Estate Planning for Families (3). The course focuses on the efficient conservation and transfer of wealth, consistent with the family's goals. It is a study of the legal, tax, financial and non-financial aspects of this process, covering topics such as trusts, wills, probate, advanced directives, charitable giving, wealth transfers and related taxes. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate

FERM 4330 Consumer Education (3). A course which includes a study of consumer activities in the marketplace and the financial world. Emphasis is given to the most important areas in which individuals and families function as consumers. Offered each Fall Semester.

#### Foods and Nutrition (NUFS)

NUFS 1110 Food Principles and Meal Management (4). A study of foods from harvest to service. A consideration of economics, grade standards, sanitation, preparation and nutritional quality is included. The topics include the planning, preparation and service of nutritious attractive meals at various cost levels for different occasions with emphasis on the conservation of time, energy and money. Two lectures and two laboratory periods. Fall Semester. Prerequisite: Family and Consumer Sciences major or consent of instructor.

NUFS 2010 Basic Nutrition Principles (3). A course in which students study nutrition and its relationship to health. Emphasis is placed on functions, sources and deficiency symptoms for the various nutrients. Regulations surrounding food and related products are presented. Nutritional requirements throughout the life cycle are introduced. Fall Semester

NUFS 2110 Elementary Nutrition (3). A general course in nutrition with emphasis on scientific principles, metabolism and requirements for nutrients. Special topics of interest to health care professionals are discussed. Spring Semester

NUFS 3110 Food Science (3). A course which includes a study of the scientific principles of food preparation. Emphasis is placed on deviations from the norm and causes. Lecture and laboratory. Prerequisite: CHEM 1010 and NUFS 1110. Spring Semester, even years.

NUFS 3120 Nutrition in the Global Community (3). In this course students apply basic nutrition principles to life situations. Course includes the study of current issues in nutrition, community resources, and world nutrition problems. Field experiences. Prerequisite: NUFS 2010 or 211.

NUFS 3130 Foodservice Equipment and Cost Control (3). A course that assists the student with the tools necessary to plan a foodservice facility and to control the costs in such a facility. Purchase specifications, budgeting, forecasting, fiscal planning and cost analysis are covered in this class.

NUFS 3330 Maternal and Child Nutrition (3). A course which includes a study of nutrition as it relates to children from prenatal life through adolescence. Application of knowledge and nutrition education are emphasized. Experiences with Early Learning Center are included. Fall Semester

NUFS 4110 Advanced Nutrition (3). A study of chemical and physiological factors in digestion, absorption, and metabolism of nutrients. Reports of recent research and their relation to problems of human nutrition are studied. Prerequisite: NUFS 2010 or 2110 and Chem 1010-1020.

NUFS 4120 Quantity Food Procurement and Production (3). A course that includes a study of methods of purchasing and storing foods in quantity, organization of labor, standards of work materials, and meal planning, and preparation in large quantities. Some experience is gained in the University Cafeteria or other food facilities. Prerequisite: NUFS 1110.

NUFS 4520 Foodservice Systems Management (3). A course that includes a study of institutional food service systems, professional ethics and qualifications for managers, employment procedures, personnel schedules, financial records, and computer applications. Field experience required. Prerequisite: NUFS 4120 or permission.

NUFS 4530 Medical Nutrition Therapy (4). A study of the modifications of the normal diet in the treatment of disease, food and drug interactions, and the role of the dietitian in health care. Prerequisites: NUFS 4110, BIO 221-222, CHEM 341. Field experiences and laboratory required.

NUFS 4620 Special Problems in Foods and Nutrition (3). (NTR 462) An individual directed study and investigation involving techniques used in nutrition research and food service management

# University Personnel and Instructional Faculty

## SCHOOL OF AGRICULTURE AND CONSUMER SCIENCES

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