FAMILY AND CONSUMER SCIENCES

Undergraduate Program Information

Courses and curricula in the department are designed to educate you as an individual and as a citizen in a changing society. They also develop a scientific attitude and the ability to conduct research directed toward solutions of problems affecting the quality of life for individuals, families and communities.

You must complete general education requirements, and a sequence of specialized course work is then identified for each major.

The following prefixes are used for courses:

• CTFM—Clothing, Textiles, and Fashion Merchandising;
• FCS—Family and Consumer Sciences;
• FCS—Family and Child Science;
• FCSE—Family and Consumer Sciences Education;
• FSTE—Food Science and Technology;
• HNDS—Human Nutrition and Dietetic Sciences.

Graduate Program Information

The candidate for the master’s degree should have an undergraduate degree in a field related to the intended area of specialization. In addition to the Graduate School requirements, the admissions criteria for the Department of Family and Consumer Sciences Graduate Program include letters of reference, standardized test scores, and other materials. Suggested departmental deadlines for review of admission materials are six weeks prior to the first day of the semester of desired start. A complete description of admission requirements should be obtained from the department.

Degrees for the Department

Clothing, Textiles and Fashion Merchandising - Bachelor of Science in Family and Consumer Sciences (http://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/clothing-textiles-fashion-merchandising-bachelor-science-family-consumer-sciences)

Family and Child Science - Bachelor of Science in Family and Consumer Sciences (http://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/bachelor-science-family-consumer-sciences)

Family and Consumer Sciences Education - Bachelor of Science in Family and Consumer Sciences (http://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences-education-bachelor-science-family-consumer-sciences)

Food Science and Technology - Bachelor of Science in Food Science and Technology (http://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/food-science-technology-bachelor-science-food-science-technology)


Minors for the Department


Professor, Esther Devall, Department Head

Professors: Bock, Devall, Eastman, Munson-McGee; Associate Professors: Chavez, Montanez, Smitely, Vaillancourt; Bartley Assistant Professors: Golem, Marin, Emeritus Professors: Cummings, Del Campo

E. Devall, Department Head, Ph.D. (Georgia) – child and family development; S. Bartley, Ph.D. (Tennessee) – family studies; G. Blanch, Ph.D. (Claremont) – education; P. Bloomquist, Ph.D. (New Mexico State) – education management and development; M. Bock, Ph.D. (Kansas State) – foods and nutrition; M. Chavez, Ph.D. (New Mexico State) – educational management; W. Eastman, Ph.D. (Texas Woman’s) – nutrition and food service systems management; E. Delgado, Ph.D. (Technical University of Berlin, Germany) – food science and technology; W. Fedio, Ph.D. (University of Alberta-Canada) – food microbiology; N. Flores, Ph.D. (Kansas State) – food science; D. Golem, Ph.D. (Rutgers) – nutritional and exercise sciences; W. Hamilton, Ed.D. (Montana State) – adult education and administration; J. Hertzman, Ph.D. (University of Nevada) – educational leadership; B. Jorgensen, Ph.D. (Virginia Tech) – family studies; S. Koukel, Ph.D. (Texas Tech) – family and consumer sciences education; K. Mandabach, Ed.D. (Houston) – higher education cultural and historical studies; M. Marin, Ph.D. (New Mexico State) – counseling and educational psychology; M. Montanez, Ph.D. (Michigan State) – psychology; S.H. Munson-McGee, Ph.D. (University of Delaware) – food processing and engineering; L. Shields, Ph.D. (New Mexico State) – educational administration; R. Smitley, Ph.D. (Texas Woman’s) – clothing, textiles, and fashion merchandising; B. Stringam, Ph.D. (University of Northern Arizona) – education; K. Vaillancourt, Ph.D. (Virginia Tech) – family studies
**Child Advocacy Studies**

**CAST 201. Introduction to Child Advocacy**
3 Credits
This is the introductory course for child advocacy studies (CAST). It covers different models for understanding child maltreatment, types and indicators of child maltreatment, controversial topics in the field, and issues and laws related to child maltreatment in various countries around the world. Students will develop critical thinking and analytical skills in assessing child maltreatment. Restricted to Dona Ana campus only.

**CAST 202. Professional and Systems Responses to Child Maltreatment**
3 Credits
Course examines the professionals and systems that respond to allegations of child abuse and neglect. Includes the differences between civil and criminal proceedings; components of a court-worthy child abuse and neglect investigation; basic child forensic interviewing; an overview of child sex offenders; and current research and controversial issues affecting the field. Restricted to Dona Ana campus only.

**Prerequisite(s):** CAST 201.

**CAST 203. Prevention, Trauma Informed Treatment and Advocacy**
3 Credits
The purpose of this course is to prepare students to recognize the effects of child maltreatment and apply interventions strategies for children and their families. Multidisciplinary approaches to prevention, advocacy and treatment of child maltreatment survivors will be presented and discussed. Topics include violence prevention research, interdisciplinary family programs, how to advocate for survivors of child abuse, case management, working with families, mental health service and controversial issues.

**Prerequisite(s):** CAST 201.

**CAST 301V. Introduction to Child Advocacy**
3 Credits
Historical review and evolution of child welfare policies, initiatives and factors that influence child welfare service. Child welfare policies and services specific to the state of New Mexico are infused throughout the course. Taught with MSW 590. Cannot receive credit for CAST 301 and MSW 590.

**CAST 302. Professional and Systems Responses to Child Maltreatment**
3 Credits
Course examines the professionals and systems that respond to allegations of child abuse and neglect. Includes the differences between civil and criminal proceedings; components of a court-worthy child abuse and neglect investigation; basic child forensic interviewing; an overview of child sex offenders; current research and controversial issues affecting the field. Students majoring in social work, criminal justice, education, sociology, psychology, nursing, and other areas will enhance their capacity to strengthen the safety net that protects children.

**Prerequisite(s):** CAST 301.

**CAST 303. Prevention, Trauma Informed Treatment and Advocacy**
3 Credits
The purpose of this course is to prepare students to recognize the effects of child maltreatment and to apply intervention strategies for children and their families. Multidisciplinary approaches to prevention, advocacy, and treatment of child maltreatment survivors will be presented and discussed. Topics include violence prevention research, interdisciplinary family programs, how to advocate for survivors of child abuse, short- and long-term effects of child abuse, case management, working with families, mental health services and controversial issues. Crosslisted with: FCS 300

**Prerequisite(s):** CAST 301.

**CAST 501. Introduction to Child Advocacy**
3 Credits
This is the introductory course for child advocacy studies (CAST). It covers different models for understanding child maltreatment, types and indicators of child maltreatment, controversial topics in the field, and issues and laws related to child maltreatment in various countries around the world. Students will develop critical thinking and analytical skills in assessing child maltreatment at the graduate level.

**CAST 502. Professional and Systems Responses to Child Maltreatment**
3 Credits
This graduate level course examines the professionals and systems that respond to allegations of child abuse and neglect. Includes the differences between civil and criminal proceedings; components of a court-worthy child abuse and neglect investigation; basic child forensic interviewing; an overview of child sex offenders; and current research and controversial issues affecting the field.

**CAST 503. Prevention, Trauma Informed Treatment and Advocacy**
3 Credits
The purpose of this course is to prepare graduate students to recognize the effects of child maltreatment and apply interventions strategies for children and their families. Multidisciplinary approaches to prevention, advocacy and treatment of child maltreatment survivors will be presented and discussed.

**Prerequisite(s):** A "B" or better in CAST 501.

**Clothing, Textiles and Fashion Merchandising**

**CTFM 178. Fundamentals of Fashion**
3 Credits
Survey of the fashion business from fiber to end product.

**CTFM 202. Fashion Practicum**
1-3 Credits (1-3)
Applied field experience in the related areas of apparel design, fashion merchandising, and textile science. May be repeated up to 3 credits.

**Prerequisite(s):** CTFM 255, ART 110G.

**CTFM 270. Fashion Illustration**
3 Credits (1+4P)
Human figure sketches and fashion illustration as a form of communication. Emphasis on color, proportion, cut, and fabric detail.

**Prerequisites:** CTFM 255, ART 110G.

**CTFM 273. Concepts in Apparel Construction**
3 Credits (1+4P)
Application of generalizations and principles of garment construction to varied fabrics and designs. Analysis and evaluation of apparel merchandise with emphasis on the quality of garment construction.

**Prerequisite(s):** Main campus only. Restricted to CTFM, FCSE majors.

**CTFM 289. Fashion Studio I**
3 Credits
Applied principles in the criteria of pattern making: flat pattern and draping techniques. Projects will require three dimensional approaches in apparel design. Restricted to: CTFM majors. Restricted to Las Cruces campus only.

**CTFM 300. Special Topics**
1-4 Credits
Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a total of 9 credits toward a degree. Restricted to Las Cruces campus only.

**Prerequisite(s):** CTFM 178; CTFM 270.
CTFM 366. Historic Fashion
3 Credits
The study of clothing styles from 3500 BC through the 20th century.
Restricted to: CTFM majors.
Prerequisite(s): CTFM 255 and CTFM 270.

CTFM 371. Textile Science
3 Credits (1+4P)
Study of fabrics used for modern clothing, furnishings, and miscellaneous end uses. Textiles testing procedures explored.
Prerequisites: CHEM 110G or consent of instructor.

CTFM 372. Fashion Merchandising
3 Credits
The apparel industry from designing through manufacturing and distribution to retailers.
Prerequisites: CTFM 178, and CTFM 255.

CTFM 373. Advanced Apparel Techniques
3 Credits
This course builds upon concepts introduced in Concepts in Apparel Construction. An in-depth study of fabric selection, advanced garment construction and tailoring. New technologies applied to sewing construction will be explored. The use of computerized sewing machines will be incorporated. Restricted to CTFM majors.
Prerequisite(s): CTFM 255 and CTFM 273.

CTFM 374. The Production of Textile and Fashion Accessories
3 Credits
The production of textiles and fashion accessories for retail.
Merchandising techniques for wholesale and retail companies. Consent of Instructor required. Restricted to: CTFM majors.
Prerequisite(s): CTFM 178 and CTFM 270.

CTFM 384. Clothing for Special Needs
3 Credits
Selection, adaptation, and design of clothing that is functional and attractive for special needs populations such as active sportswear, handicapped, elderly, and various specialty populations.
Prerequisite: consent of instructor.

CTFM 402. Field Experience Marketing Training
1-3 Credits (1-3)
Practical experience in clothing manufacturing or retailing. Supervised by resident faculty and supervisor at the work site. Report required. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: CTFM majors.

CTFM 460. Cultural Perspectives in Dress
3 Credits
Explores the social, psychological and cultural aspects of dress and appearance which includes the relationship of dress to physical and social environments, aesthetic and personal expression and cultural ideas and values.
Prerequisite(s): CTFM 255 and CTFM 366.

CTFM 474. Fashion Promotion
3 Credits
This class focuses on the comprehensive nature of promotion in the merchandising environment of fashion related goods. Consent of Instructor required. Restricted to: CTFM majors.
Prerequisite(s): CTFM 255 and CTFM 372.

CTFM 475. Fashion Buying
3 Credits
Fundamental principles and procedures for successful merchandising of fashion goods, responsibilities of buyers, fashion trends, consumer demands, and merchandising arithmetic.
Prerequisites: ACCT 251, CTFM 372, and CTFM 474.

CTFM 476. Apparel Design by Draping and Pattern Drafting
3 Credits (1+4P)
Theory and application of draping and drafting garment patterns (required lab). Consent of Instructor required. Restricted to: CTFM majors.
Prerequisite(s): CTFM 255, CTFM 270 CTFM 273, and CTFM 373.

CTFM 492. Special Problems
1-4 Credits
Individual research study in a selected subject area of family and consumer sciences. Maximum of 4 credits per semester and a total of 6 credits toward a degree.

CTFM 571. Textile Science
3 Credits (1+4P)
Fabrics used for modern clothing, furnishings, and miscellaneous end uses. Explores textiles testing procedures. Students enrolling in the 500-level class will be required to complete additional assignments beyond what is required for CTFM 371.
Prerequisite: CHEM 110G or consent of instructor.

CTFM 572. Fashion Merchandising
3 Credits
Covers the apparel industry from designing through manufacturing and distribution to retailers. Students enrolling in the 500-level class will be required to complete additional assignments beyond what is required for CTFM 372.
Prerequisites: CTFM 178 and CTFM 255 or consent of instructor.

CTFM 584. Graduate Study in Clothing for Special Needs
3 Credits (1+4P)
Graduate study in the selection, adaptation, and design of clothing that is functional and attractive for special needs populations such as active sportswear, handicapped, elderly, and various specialty populations.
Prerequisites: CTFM 472 and CTFM 476.

CTFM 598. Special Research Programs
1-4 Credits
Individual investigations, either analytical or experimental. May be repeated for a maximum of 4 credits per semester and no more than 6 credits toward a degree.

Family and Child Science

FCS 181. Interpersonal Skills in Intimate Relationships
3 Credits
Developing social skills within friendships, dating relationships, marriage, parenting, and families. May be repeated up to 3 credits. Restricted to Las Cruces and Dona Ana campuses.

FCS 210. Infancy and Early Childhood in the Family
3 Credits
Research and theory relevant to prenatal development and the physical, mental, and socio-emotional development of the child from birth to age five. Attitudes, knowledge, and skills needed for working with young children and their families. Restricted to Las Cruces campus only.
FCS 211. Middle Childhood Development in the Family
3 Credits
Research and theory relevant to the physical, mental, social, and emotional development of the child from age five to age twelve. Attitudes, knowledge, and skills related to working with school-age children in the family system. Observation in a variety of settings may be required. Restricted to Las Cruces campus only.

FCS 212. Adolescent Development and the Family
3 Credits
Research and theory relevant to the physical, mental, social, and emotional development of the children ages 12 to 18. Attitudes, knowledge, and skills related to working with adolescents in the family system. Observation in a variety of settings may be required. Restricted to Las Cruces campus only.

FCS 213. Adult Development and Aging
3 Credits
Research and theory related to the physical, mental, social, and emotional development of older adults. Attitudes, knowledge, and skills related to working with older adults in the family system, including normative, and nonnormative transitions. Restricted to Las Cruces campus only.

FCS 300. Special Topics
1-4 Credits
Specific subjects and credits announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits.

FCS 301. Personal and Family Finance
3 Credits
Principles, processes and procedures involved in effective utilization and management of financial resources to meet the needs of individuals and/or families. Open to nonmajors.

3 Credits
Consumer issues related to social, political, and economic components of the larger social system. Focuses on consumer rights and responsibilities within the marketplace.

FCS 380. Family Dynamics
3 Credits
The dynamics of family relationships and changes influencing contemporary families. Interaction between the family and other social systems will be examined. Open to nonmajors.

FCS 383. Parenting and Child Guidance
3 Credits
Theories, principles, and skills essential for parents and professionals in guiding children within the family system. Problem prevention techniques are stressed.

FCS 424. Field Experience: Issues and Ethics
4 Credits
Supervised work experience in community agencies providing services to family systems. Discussion of professional issues and ethical dilemmas. A total of 8 credits must be taken. Consent of instructor required. Restricted to: Main campus only. Restricted to FCS majors.
Prerequisite(s): FCS 380 or equivalent, junior standing, and an overall GPA of at least 2.5 and consent of instructor.

FCS 449V. Family Ethnicities and Subcultures
3 Credits
Comparative study of American family subsystems with respect to selected social, economic, and cultural backgrounds. Interaction of these subsystems in American society. Differentiated assignments for graduate students.

FCS 492. Special Problems
1-4 Credits
Individual research in a selected subject area of family and consumer sciences. Maximum of 4 credits per semester and a total of 6 credits.

FCS 500. Infancy and Early Childhood in the Family
3 Credits
Research and theory relevant to prenatal development and the physical, mental, and socio-emotional development of the child from birth to age 5. Attitudes, knowledge, and skills needed for working with young children and their families. May be repeated up to 3 credits.

FCS 510. Middle Childhood Development in the Family
3 Credits
Advanced study in research and theory relevant to the physical, mental, social, and emotional development of children from ages five to twelve. Attitudes, knowledge, and skills needed for working with school-age children and their families. May be repeated up to 3 credits.

FCS 511. MIDDLE CHLDHD DEV IN FMLY
3 Credits
Research and theory relevant to the physical, mental, and socio-emotional development of children from ages five to twelve. Attitudes, knowledge, and skills needed for working with school-age children and their families. May be repeated up to 3 credits.

FCS 512. Adolescent Development and the Family
3 Credits
Advanced study in research and theory relevant to the physical, mental, social, and emotional development of the child, ages 12-18. Attitudes, knowledge, and skills related to working with adolescents in the family system. May be repeated up to 3 credits.

FCS 524. Supervised Practicum
1-9 Credits
Supervised experience in organizations providing services to families and children. Course subtitled in the Schedule of Classes. May be repeated for a maximum of 9 credits. Graded S/U.
Prerequisite: consent of instructor.

FCS 525. Supervised Clinical Practice
1-9 Credits (2-18P)
Supervised clinical experience in Marriage and Family Therapy. Includes reviews of audio, video, and/or live sessions and case presentations. Maximum of 9 credits toward a degree. May be repeated up to 20 credits.

FCS 548. Adult Development and Aging
3 Credits
Advanced study in research and theory related to the physical, mental, social, and emotional development of older adults. Attitudes, knowledge, and skills related to working with older adults in the family system, including normative and non-normative role transitions.

FCS 549. Family Ethnicities and Subcultures
3 Credits
Comparative study of American family subsystems with respect to selected social, economic and cultural backgrounds. Interaction of these subsystems in American society. Students responsible for all requirements for FCS 449V plus additional work.

FCS 562. The Business and Practice of Marriage and Family Therapy
1 Credit
This seminar course will provide students with an overview of the business and practice of Marriage and Family Therapy to the end that they will understand how to develop and maintain a private practice in the field of MFT. Restricted to: FCS (MFT) majors. S/U Grading (S/U, Audit).
FCS 572. Family Dysfunction and Diagnosis
3 Credits
A study of the development of abnormal behavior patterns and characteristics to include the major mental and personality disorders and how these can influence and impact family systems. Emphasis is on the symptomology and/or life circumstances and events described in the various diagnostic categories.
Prerequisite(s): Students must be enrolled in a clinical program (i.e MFT, CEP, MSW).

FCS 582. Theories of Marriage and Family Therapy
2 Credits
A balanced study of major theories, research, applications and principles of marriage and family therapy. This course will examine major therapy models and the theories they are derived from as well as the effectiveness of specific therapy models for specific mental health disorders through research. May be repeated up to 4 credits.

FCS 583. Parenting and Child Guidance
3 Credits
Theories, principles, and skills essential for parents and professionals in guiding children within the family system. Problem prevention techniques are stressed.

FCS 584. Family Law and Ethics
3 Credits
Study of selected aspects of federal and state laws and ethical issues as they relate to the family system.

FCS 585. The Family System
3 Credits
Contemporary family interaction: concepts, composition, resource and environment.

FCS 586. Sexuality and Family Dynamics
3 Credits
Psychosocial and physiological aspects of human sexuality from a life span and family systems perspective.

FCS 587. Contemporary Marriage and Family Issues
3 Credits
Investigation of one of the following topics each semester: dual career marriages, nontraditional relationships, aged in marriage.

FCS 589. Family Crises and Rehabilitation
3 Credits
Examination of the major crises experienced by families. Emphasis on family system functioning rather than individual functioning. Preventative measures, positive coping strategies, and therapeutic intervention approaches examined.

FCS 590. Special Topics
1-4 Credits
Specific subjects to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a total of 9 credits toward a degree.

FCS 592. Strategies in Family Therapy
2 Credits
Effective intervention strategies in family therapy practice. Live and taped role plays of interventions for various family problems required. Constructive approaches for working with family systems and third-party payers. May be repeated up to 4 credits.

FCS 598. Special Research Programs
1-4 Credits
Individual investigations either analytical or experimental. Maximum of 4 credits per semester and no more than 6 credits toward a degree.

FCS 599. Master's Thesis
15 Credits
Thesis

Family and Consumer Science

FCSC 400. Research Methods in Family and Consumer Sciences
3 Credits
Introduction to research design and methodology in Family and Consumer Sciences. Overview of common research designs and data collection strategies. Prepares students to critique published research and perform basic skills including hypotheses development and conducting a literature search.

FCSC 500. Research Methods
3 Credits
This course covers the critical evaluation of research literature, development of research proposals and principles of program evaluation. Students will be introduced to the application of qualitative or quantitative methods. Students will be expected to develop research questions and test hypotheses using statistical analysis and a variety of methodologies.

FCSC 598. Special Research Programs
1-4 Credits
Individual investigations, either analytical or experimental. Maximum of 4 credits per semester and no more than 6 credits toward a degree.

FCSC 599. Master's Thesis
15 Credits
May be repeated for unlimited credit, maximum of 6 credits toward a degree.

Family and Consumer Science Education

FCSE 235. Housing and Interior Design
3 Credits
Investigation of types of housing and factors impacting housing decisions for families. Selection, planning, and arrangement of interior components of homes to meet the needs of the family. Restricted to Las Cruces campus only.
Prerequisite(s): No prerequisites.

FCSE 245. Overview of Family and Consumer Sciences Teaching
3 Credits
Overview of planning and teaching skills. Supervised experiences in observing and directing the learning of secondary family and consumer sciences students. Philosophy and history of the profession.

FCSE 345. Management Concepts in Family and Consumer Sciences Teaching
3 Credits
Incorporation and application of management concepts in family and consumer sciences subject matter. Practical experience teaching management and ways to use management skills to plan, implement, and evaluate the teaching-learning transaction.

FCSE 348. Teaching in Informal Family and Consumer Sciences Settings
3 Credits
Learning principles and theories with application in informal family and consumer sciences education situations. Includes supervised experience in use of teaching strategies.
Prerequisite: overall GPA of at least 2.5 or consent of instructor.
FCSE 445. Career and Technical Education Programs
3 Credits
History and development of career and technical programs. Ancillary functions of family and consumer sciences teachers, including student evaluation and leadership development for students. Experiences in extension programs and teaching. Ethical issues and concerns of educators are introduced. Lifelong leadership development and evaluation tools for educators are explored. May be repeated up to 3 credits.

FCSE 446. Teaching Methods I for Family and Consumer Sciences
3 Credits
Objectives, content, and organization of family and consumer sciences curriculum in high schools; materials and methods of teaching. Restricted to majors.
Prerequisites: FCSE 245 and FCSE 345 and an overall GPA of at least 2.5, or consent of instructor.

FCSE 447. Teaching Methods II for Family and Consumer Sciences
3 Credits
Prerequisites: FCSE 245, FCSE 345, FCSE 445, FCSE 446 and an overall GPA of at least 2.5, or consent of instructor.

FCSE 448. Supervised Teaching in Family and Consumer Sciences
12 Credits
Seventy (70) days of full-time supervised teaching in selected high schools. Consent of Instructor required. Restricted to majors.
Prerequisite(s): FCSE 446, an overall GPA of at least 2.5, and consent of instructor.

FCSE 492. Special Problems
1-4 Credits
Individual research study in a selected subject area of family and consumer sciences. Maximum of 4 credits per semester and 6 credits toward degree.

FCSE 545. Graduate Study in Vocational Programs for Youth and Adults
3 Credits
History and development of career and technical programs. Ancillary functions of family and consumer sciences teachers, including student evaluation and leadership development for students. Experiences in extension programs and teaching. Ethical issues and concerns of educators are introduced. Lifelong leadership development and evaluation tools for educators are explored. May be repeated up to 3 credits.

FCSE 546. Graduate Study in Teaching Methods I
3 Credits
Objectives, content, and organization of family and consumer sciences in high schools; materials and methods of teaching. Additional assignments beyond FCSE 446 required for students registering in FCSE 546.

FCSE 547. Graduate Study in Teaching Methods II
3 Credits
Planning, preparation, and strategies for teaching family and consumer sciences in the secondary schools. Additional assignments beyond FCSE 447 required for students registering in FCSE 547.

FCSE 548. Graduate Study in Supervised Teaching in Family and Consumer Sciences
12 Credits
Seventy of full-time, supervised teaching in selected schools. Additional assignments beyond FCSE 448 required for students registering in FCSE 548. Consent of Instructor required.
Prerequisite(s): FCSE 446 or FCSE 546, and consent of instructor.

FCSE 590. Special Topics
1-4 Credits
Specific subjects and credits to be announced in the Schedule of Classes. May be repeated for a maximum of 9 credits toward a degree, 4 credits per semester.

Food Science and Technology
FSTE 164G. Introduction to Food Science and Technology
4 Credits (3+2P)
An introductory course in the scientific study of the nature and composition of foods and their behavior during all aspects of their conversion from raw materials to consumer food products.

FSTE 175. ACES in the Hole Foods I
4 Credits
Food production activities related to operation of ACES in the Hole Foods, a student-run food company that will give FSTE majors hands-on experience in all aspects of developing, producing and marketing food products. Restricted to Las Cruces campus only.
Prerequisite(s): Students enrolled in this class must possess A Food Handler Card.

FSTE 200. Special Topics
1-4 Credits
Specific topics and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits.

FSTE 210G. Survey of Food and Agricultural Issues
3 Credits
Same as AG E 210G.

FSTE 263G. Food Science I
4 Credits (3+2P)
The scientific study of the principles involved in the preparation and evaluation of foods. May be repeated up to 4 credits.

FSTE 275. ACES in the Hole Foods II
4 Credits
Food production activities related to operation of ACES in the Hole Foods, a student-run food company that will give FSTE majors hands-on experience in all aspects of developing, producing and marketing food products. May be repeated up to 4 credits.
Prerequisite(s): FSTE 175 and Have a Food Handler Card.

FSTE 320. Food Microbiology
4 Credits (3+2P)
Detrimental and beneficial microbiological aspects of food products. Methods of quantification and identification of microorganisms associated with food spoilage and preservation. May be repeated up to 4 credits.
Prerequisite(s): BIOL 111G and BIOL 111L, or BIOL 211G and BIOL 211L, or BIOL 190, or consent of instructor.
FSTE 325. Food Analysis
3 Credits (2+2P)
Basic chemical and physical techniques used in establishing nutritional properties and overall acceptance of food products. May be repeated up to 3 credits.
Prerequisite(s): CHEM 111 or consent of instructor.

FSTE 328. Introduction to Food Engineering
3 Credits (2+2P)
Basic engineering principles including mass and energy balances, fluid flow, heat transfer and chemical kinetics and their application to food processing unit operations. Video and laboratory participation are used to enhance course content and relevance. May be repeated up to 3 credits.
Prerequisite(s): MATH 142G or consent of instructor.

FSTE 331. Food Preservation
3 Credits (2+2P)
Processes used in home and commercial food preservation, including canning, freezing, drying, and irradiation. May be repeated up to 3 credits.
Prerequisite(s): HNFS 263.

FSTE 375. ACES in the Hole Foods III
4 Credits (2+2P)
Food production activities related to operation of ACES in the Hole Foods, a student-run food company that will give FSTE majors hands-on experience in all aspects of developing, producing and marketing food products. May be repeated up to 2 credits. Restricted to: FSTE majors.
Prerequisite(s): FSTE 275 and Have a Food Handler Card.

FSTE 412. Food Chemistry
3 Credits
Comprehensive study of the chemical and physiochemical properties of food constituents. Chemical changes involved in the production, processing, and storage of food products and basic techniques used to evaluate chemical and physiochemical properties of foods.
Prerequisites: CHEM 111G, CHEM 112G, and CHEM 211, or consent of instructor.

FSTE 423. Food Processing Technologies
4 Credits (3+2P)
Common food processing unit operations such as raw material preparation, separation, concentration, fermentation, pasteurization, sterilization, extrusion, dehydration, baking, frying, chilling, freezing, controlled atmosphere storage, water, waste and energy management, packaging, materials handling and storage and process control. Application of principles to processing food in a laboratory setting.
Prerequisite(s): FSTE 328.

FSTE 425. Sensory Evaluation of Foods
3 Credits (2+2P)
Principles and procedures involved in the sensory evaluation of foods. Physiological, psychological and environmental factors affecting the evaluation of sensory properties. Analysis and interpretation of sensory data.
Prerequisite(s): FSTE 263G and A ST 311 or STAT 251.

FSTE 429. Product Development
3 Credits (1+4P)
Application of chemical, physical, nutritional and psychological principles and experimental methods to the development and evaluation of a food product for a specified food product development competition.
Prerequisite(s): FSTE 320 and FSTE 425.

FSTE 430. Designing and Brewing Great Beers of the World
3 Credits (1+4P)
The science and technology of brewing unit operations and the ingredients used in beer brewing. That knowledge is then applied to designing and brewing classic world beer styles. Styles investigated change every semester but typically include India Pale Ale, Pale Ale, Stout, Porter, Hefeweizen, Scottish Ale, and Black IPA. Comprehensive evaluation of the product relative to style guidelines completes the design-brew-evaluate cycle. Students must be at least 21 years of age on the first day of class. May be repeated up to 3 credits.

FSTE 450. Special Topics
1-4 Credits
Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits towards a degree. Consent of instructor required.

FSTE 475. ACES in the Hole Foods IV
1-4 Credits (2-8P)
Food production activities related to operation of ACES in the Hole Foods, a student-run food company that will give FSTE majors hands-on experience in all aspects of developing, producing and marketing food products. May be repeated up to 8 credits. Restricted to: FSTE majors.
Prerequisite(s): FSTE 375 Have a Food Handler Card.

FSTE 492. Special Problems
1-4 Credits
Individual research study in a selected subject of Family and Consumer Sciences. Maximum of 4 credits per semester and a grand total of 8 credits towards a degree. Consent of instructor required.

FSTE 500. Data Analysis for Food Scientists
3 Credits (3)
An introduction to data analysis of food scientists. Modern statistical techniques used to analyze typical data collected by food scientists and researchers will be covered. Consent of Instructor required.

FSTE 520. Graduate Study in Food Microbiology
3 Credits (2+3P)
Detrimental and beneficial microbiological aspects of food products. Methods of quantification and identification of microorganisms associated with food spoilage and preservation. Additional work required at the graduate level.
Prerequisites: BIOL 111G/111L, or BIOL 211G/211L, or BIOL 190, or consent of instructor.

FSTE 521. Graduate Study in Food Chemistry
3 Credits
Comprehensive study of the chemical and physiochemical properties of food constituents. Chemical changes involved in the production, processing and storage of food products and basic techniques used to evaluate chemical and physiochemical properties of foods. Additional work required at the graduate level.
Prerequisites: CHEM 111G, CHEM 112G, and CHEM 211, or consent of instructor.

FSTE 523. Food Processing Technologies
4 Credits (3+2P)
Common food processing unit operations such as raw material preparation, separation, concentration, fermentation, pasteurization, sterilization, extrusion, dehydration, baking, frying, chilling, freezing, controlled atmosphere storage, water, waste and energy management, packaging, materials handling and storage and process control. Application of principles to processing food in a laboratory setting. Additional work beyond that for FSTE 423 required at the graduate level.
Prerequisite(s): FSTE 528.
FSTE 524. Sensory Evaluation of Foods
3 Credits (2+3P)
Principles and procedures involved in the sensory evaluation of foods. Physiological, psychological and environmental factors affecting the evaluation of sensory properties. Analysis and interpretation of sensory data.
Prerequisite(s): FSTE 263G and A ST 311 or STAT 251.

FSTE 525. Graduate Study in Food Analysis
3 Credits (2+3P)
Covers basic chemical and physical techniques used in establishing nutritional properties and overall acceptance of food products. Additional work required at the graduate level.
Prerequisite(s): CHEM 111 or consent of instructor.

FSTE 532. Designing and Brewing Great Beers of the World
3 Credits (2+2P)
The science and technology of brewing unit operations and the ingredients used in beer brewing. That knowledge is then applied to designing and brewing classic world beer styles. Styles investigated change every semester but typically include India Pale Ale, Pale Ale, Stout, Porter, Hefeweisen, Scottish Ale, and Black IPA. Comprehensive evaluation of the product relative to style guidelines completes the design-brew-evaluate cycle. Students must be at least 21 years of age on the first day of class.

FSTE 560. Rumen Microbiology (so)
3 Credits
Same as ANSC 560.

FSTE 575. ACES in the Hole Foods
1-4 Credits (2-8P)
Food production activities related to operation of ACES in the Hole Foods, a student-run food company that will give FSTE majors hands-on experience in all aspects of developing, producing and marketing food products. May be repeated up to 8 credits.
Prerequisite(s): Students must possess a food handler card.

FSTE 598. Special Research Programs
1-4 Credits
Individual investigations either analytical or experimental. Maximum of 4 credits per semester and no more than 6 credits towards a degree. Consent of instructor required.

Human Nutrition and Diet

HNDS 201. Seminar I- The Field of Dietetics
1 Credit
This course will introduce students to the field experience, careers, and professions in nutrition. This course is required for students pursuing a Didactic Program in Dietetics verification statement. May be repeated up to 1 credits. Consent of Instructor required. Restricted to: HNDS majors. Restricted to Las Cruces and Dona Ana campuses.

HNDS 251. Human Nutrition
3 Credits
Principles of normal nutrition, relation of nutrition to health. Course contains greater amounts of chemistry and biology than HNDS 163. Open to nonmajors.

HNDS 300. Special Topics
1-4 Credits
Specific topics and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits.

HNDS 350. Nutrition Throughout the Lifecycle
3 Credits
Relationship of the stages of the human life cycle to changes in nutrient need.
Prerequisites: BIOL 254 and (HNDS 163 or HNDS 251), or consent of instructor.

HNDS 360. Food for Health
4 Credits
This course is designed to provide students the opportunity to learn about the intersection of nutrition and health in terms of food and diet. Students will be introduced to basic concepts within nutrition education, nutrition communication, nutrition and health and food culture.
Prerequisite(s): FSTE 263; HNDS 251.

HNDS 363. Quantity Food Production and Service
6 Credits (1+10P)
Covers quantity food production including cooking concepts, sanitation and safety, teamwork, and management responsibilities. Students will apply this knowledge developing product for sale in a student run restaurant. Proof of current ServSafe or NM Food Handler certification required. May be repeated up to 6 credits. Crosslisted with: HRTM 363.
Prerequisite(s): HRTM 263.

HNDS 401. Field Experience- Clinical Dietetics
1-8 Credits (1-8)
Experience in various areas of clinical nutrition facilities with emphasis on nutrition care of patients. Practical experience with supervision by resident faculty as well as supervisor at work site. Performance at work site graded in accordance with university standards. May be repeated for a maximum of 8 credits. Consent of instructor required. Restricted to: Main campus only.
Prerequisite(s): HNDS 201, overall GPA of 2.5 or higher and junior or senior standing and consent of instructor.

HNDS 403. Community Nutrition
3 Credits
Overview of the practice of community nutrition. Includes program planning, needs assessment, program implementation and program evaluation. Role of public and private agencies in nutrition programs that impact on nutrition of individuals and groups in the community.
Prerequisite: HNDS 350 or consent of instructor.

HNDS 404. Maternal, Infant and Child Nutrition
3 Credits
Nutritional needs and status during pregnancy, infancy, childhood, and adolescence. Applications also made to preschools and day care centers.
Prerequisite: HNFS 251 or consent of instructor.

HNDS 405. Seminar II- Entering the Field of Dietetics
1 Credit
Students will develop professional materials that will be used in their future careers including a personal statement, curriculum vitae, resume, and interview dialogues. Students will become familiar with career options in the field of dietetics and learn to navigate the processes of becoming a registered dietitian or dietetic technician, registered. Consent of Instructor required. Crosslisted with: HNDS 505. Restricted to: HNDS majors.
Prerequisite(s): Students must be enrolled in their last fall semester prior to planned graduation from the DPD program; HNDS 201, HNDS, 251, HNDS 350.
Corequisite(s): HNDS 403, HNDS 446, AND HNDS 448.
HNDS 407. Field Experience Community Nutrition  
1-8 Credits  
Experience working with nutritional problems of individual families of all socioeconomic and age levels and with agencies concerned with community nutrition. Practical experience with supervision by resident faculty as well as supervisor at the work site. Performance at work site graded in accordance with university standards. May be repeated for a maximum of 8 credits. Restricted to majors.  
Prerequisites: HNFS 201, overall GPA of at least 2.5 and junior or senior standing or consent of instructor.

HNDS 409. Dietetic Science Capstone  
3 Credits  
This course will provide a cumulative review and assessment of the foundational knowledge, concepts, and skills presented throughout the didactic program in nutrition and dietetics to ensure readiness to proceed within the field of dietetics. Students will apply professional skills to prepare them for their future careers. Students will also be guided through the dietetic internship application process. Consent of Instructor required. Crosslisted with: HNDS 509. Restricted to: Dietetics Option majors.  
Prerequisite(s): Students must be enrolled in their last spring semester prior to planned graduation from the DPD program.

HNDS 410. Sports Nutrition  
3 Credits  
Role of nutrition in physical performance of competitive and recreational sports participants.  
Prerequisites: BIOL 254, BCHE 341, and HNDS 251, or consent of instructor.

HNDS 420. Nutrition Counseling and Communication  
3 Credits  
This course is designed to meet the needs of individuals entering the healthcare/dietetics field who have little counseling experience, but have a strong foundational knowledge in the field of dietetics. It includes counseling techniques and strategies, behavior change, interviewing, cultural competence, mass media, and nutrition education. Consent of Instructor required.  
Prerequisite(s): HNDS 251, HNDS 350.

HNDS 430. Food Service Organization and Management  
3 Credits  
Personnel, financial and general management in institutional and commercial food service operations.  
Prerequisite: junior/senior standing or consent of instructor.

HNDS 440. Nutrition Education and Research  
3 Credits  
Course will enable students to apply general education and research knowledge to the field of nutrition. Nutrition information will be applied to education topics including learning objective development, backwards design of curriculum, student centered learning and learning assessment. Crosslisted with: HNDS 540.  
Prerequisite(s)/Corequisite(s): HNDS 251, 350, and 360.

HNDS 446. Diet Therapy I  
3 Credits  
Special diets and physiological basis for their use. Laws and regulations concerning the practice of dietetics.  
Prerequisites: BIOL 254, BCHE 341, and HNDS 251, or consent of instructor.

HNDS 446 L. Diet Therapy I Laboratory  
1 Credit  
Supplements HNDS 446. Students will perform nutrition assessments, nutrition focused physical exams, apply medical nutrition therapy-based interventions and practice patient discharge education for specific disease states. Must be taken with HNDS446. Restricted to: HNDS majors.  
Corequisite(s): HNDS 446.

HNDS 448. Advanced Nutrition  
3 Credits  
Application of biochemistry and physiology to nutrition. Restricted to: Main campus only.  
Prerequisite(s): BIOL 254, BCHE 341, and HNFS 251, or consent of instructor.

HNDS 449. Diet Therapy II  
3 Credits  
Continuation of HNDS 446.  
Prerequisite: HNDS 446 or consent of instructor.

HNDS 449 L. Diet Therapy II Laboratory  
1 Credit  
Supplements HNDS 449. Students will apply medical nutrition therapy to specific disease states with special emphasis on writing nutrition support orders and learning to utilize nutrition support equipment. Must be taken with HNDS449. Restricted to: HNDS majors.  
Corequisite(s): HNDS 449.

HNDS 450. Special Topics  
1-4 Credits  
Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits.

HNDS 455. Billing and Coding for Dietetics  
3 Credits  
This course provides students with an overview of billing and coding practices for medical nutrition therapy that ensure proper reimbursement for services. Students will learn nutrition related billing codes, apply nutrition care process terminology to documentation, and discover how policy affects current and future coverage of nutrition services. Crosslisted with: HNDS 555.  
Prerequisite(s): HNDS 446, HNDS 449.

HNDS 450. Special Problems  
1-4 Credits  
Individual research study in a selected subject area of family and consumer sciences. Maximum of 4 credits per semester and a total of 8 credits.

HNDS 500. Orientation to Dietetic Internship  
3 Credits  
Dietetic interns prepare for supervised practice rotations. Topics include professionalism, Code of Ethics, and dietetic internship portfolios. Consent of Instructor required.  
Prerequisite(s): Acceptance into Dietetic Internship program.

HNDS 501. Advanced Animal Nutrition (so)  
3 Credits  
Same as ANSC 501.  
Prerequisite: CHEM 211 or consent of instructor.
HNDS 549. Diet Therapy II
3 Credits
Continuation of HNDS 546.
Prerequisites: HNDS 546 or consent of instructor.

HNDS 551. Graduate Study in Community Nutrition
3 Credits
Overview on the practice of community nutrition to include program planning, needs assessment, program implementation and program evaluation. Role of public and private agencies in nutrition programs that impact on nutrition of individuals and groups in the community. Additional work required at the graduate level.
Prerequisite: HNDS 350 or consent of instructor.

HNDS 560. Dietetic Intern Seminar
1 Credit
Portfolio development for dietetic interns during supervised practice rotations. May be repeated up to 3 credits. Consent of Instructor required.
Prerequisite(s): Acceptance into the NMSU dietetic internship.

HNDS 562. Dietetic Internship: Supervised Practice in Community Nutrition
1-8 Credits (2-6P)
Provides dietetic interns with a minimum of 500 clock hours of supervised practice in community nutrition to include an emphasis in Cooperative Extension Service. Dietetic interns work under the guidance of faculty and community nutrition professionals. May be repeated up to 8 credits. Consent of Instructor required. Restricted to: HNFS majors.
Prerequisite(s): Acceptance into Dietetic Internship.

HNDS 563. Community Nutrition for Dietetic Interns
3 Credits
Advanced topics in community nutrition to include conducting community nutrition needs assessments, program planning and grant writing. Consent of instructor required. Restricted to HNDS majors.
Prerequisite(s): Acceptance into Dietetic Internship.

HNDS 564. Dietetic Internship: Supervised Practice in Food Service Management
1-5 Credits (2-10P)
Provides dietetic interns with a minimum of 300 clock hours of supervised practice in foodservice management. Dietetic interns work under the guidance of faculty and foodservice management professionals. Students must complete a total of 4 credit hours of HNDS 564. May be repeated up to 5 credits. Consent of Instructor required.
Prerequisite(s): Acceptance into Dietetic Internship.

HNDS 565. Foodservice Management for Dietetic Interns
3 Credits
Advanced topics in foodservice systems management to include conducting business planning and marketing. Consent of Instructor required. Restricted to: HNFS majors.
Prerequisite(s): Acceptance into Dietetic Internship.

HNDS 566. Dietetic Internship: Supervised Practice in Clinical Dietetics
1-8 Credits (2-16P)
Provides dietetic interns with a minimum of 500 clock hours of supervised practice in clinical dietetics. Dietetic interns work under the guidance of faculty and dietetics professionals. May be repeated up to 8 credits. Consent of Instructor required.
Prerequisite(s): Acceptance into Dietetic Internship.
HNDS 567. Nutrition Care Process for Dietetic Interns  
3 Credits  
Advanced topics in nutrition care process and model to include medical nutrition therapy and evidence-based research and outcomes assessment in clinical dietetics. Consent of instructor required. Restricted to HNDS majors.  
Prerequisite(s): Acceptance into Dietetic Internship.

HNDS 568. Review Course for National RD Exam  
3 Credits  
Completion of dietetic internship portfolio and preparation for the national registration examination for dietitians. Consent of Instructor required.  
Prerequisite(s): Acceptance into Dietetic Internship.

HNDS 590. Special Topics  
1-4 Credits  
Specific subjects to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a total of 9 credits toward a degree.

HNDS 598. Special Research Programs  
1-4 Credits  
Individual investigations either analytical or experimental. Maximum of 4 credits per semester and no more than 6 credits toward a degree.

HNDS 626. Nutrient Metabolism II: Carbohydrates, Lipids, and Energetics (se)  
4 Credits  
Same as ANSC 626.