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
- FCSC—Family and Consumer Sciences;
- FCST—Family and Child Science;
- FSTE—Food Science and Technology;
- NUTR— Nutrition

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

Bachelor Degree(s)

- Family and Consumer Sciences Education - Bachelor of Science in Family and Consumer Sciences (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/family-consumer-sciences-education-bachelor-science-family-consumer-sciences/)
- Fashion Merchandising and Design - Bachelor of Science in Family and Consumer Sciences (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/fashion-merchandising-design-bachelor-science-family-consumer-sciences/)
- Food Science and Technology (Culinary Science) - Bachelor of Science in Food Science and Technology (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/food-science-technology-culinary-science--bachelor-science-food-science-technology/)
- Food Science and Technology (Meat Science) - Bachelor of Science in Food Science and Technology (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/food-science-technology-meat-science--bachelor-science-food-science-technology/)
- Food Science and Technology (Science, Technology and Engineering) - Bachelor of Science in Food Science and Technology (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/food-science-technology-science-tech-engr-bachelor-science-food-science-technology/)
- Human Development & Family Science - Bachelor of Science (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/family-child-science-bachelor-science-family-consumer-sciences/)
- Human Development and Family Science - Bachelor of Science (Online) (https://catalogs.nmsu.edu/global/nmsu-global/human-development-family-science-bs-online/)
- Human Nutrition and Dietetic Science (Nutrition Education) - Bachelor of Science in Family and Consumer Sciences (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/human-nutrition-dietetic-sciences-nutrition-ed-bachelor-science-family-consumer-sciences/)
- Human Nutrition and Dietetic Science (Pre-Dietetics/Dietetics) - Bachelor of Science in Family and Consumer Sciences (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/human-nutrition-dietetic-sciences-pre-dietetics-dietetics-bachelor-science-family-consumer-sciences/)

Master Degree(s)

- Family and Consumer Sciences (Couples, Marriage and Family Therapy) - Master of Science (https://catalogs.nmsu.edu/nmsu/graduate-school/family-consumer-sciences-couples-marriage-family-therapy-ms/)
- Family and Consumer Sciences (Food Science and Technology) - Master of Science (https://catalogs.nmsu.edu/nmsu/graduate-school/family-consumer-sciences-food-science-tech-ms/)
- Family and Consumer Sciences (Hotel, Restaurant and Tourism Management) - Master of Science (https://catalogs.nmsu.edu/nmsu/graduate-school/family-consumer-sciences-hrtm-ms/)
- Family and Consumer Sciences (Human Nutrition & Dietetic Sciences) - Master of Science (https://catalogs.nmsu.edu/nmsu/graduate-school/family-consumer-sciences-hnds-ms/)

Minors for the Department

- Culinary Science - Undergraduate Minor (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/culinary-science-undergraduate-minor/)
- Fashion Merchandising & Design - Undergraduate Minor (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/clothing-textiles-fashion-merchandising-undergraduate-minor/)
- Food Science - Undergraduate Minor (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/food-science-undergraduate-minor/)
- Human Development and Family Science - Undergraduate Minor (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/family-child-science-undergraduate-minor/)
- Nutrition - Undergraduate Minor (https://catalogs.nmsu.edu/nmsu/agricultural-consumer-environmental-sciences/family-consumer-sciences/nutrition-undergraduate-minor/)

Merranda Marin, Department Head

Professors Marin, Montañez, Moreno, Delgado

Associate Professors Gomez, Plawecki

Assistant Professors Ahn, Martin, Martinez-Monteagudo, Sabillon Galeas

College Professor Vaillancourt, Coffeen

College Assistant Professors Azcarate, Phillips

I. Ahn, Ph.D. (Chung-Ang University, Korea)- textile and clothing; K. Coffeen, Ph.D. (New Mexico State University)- educational leadership; E. Delgado, Ph.D. (Technical University of Berlin, Germany)–food science and technology; S. Gomez, PhD (University of Illinois-Chicago) - nutritional epidemiology; S. Martin, Ph.D. (South Dakota State University)- nutrition and exercise science; M. Marin, Ph.D. (New Mexico State University)– counseling and educational psychology; M. Montanez, Ph.D. (Michigan State University)– psychology; R. Moreno, Ph.D. (Stanford University)–child development; S. Phillips, M.S. (New Mexico State University)- family and consumer sciences; L. Sabillon Galeas, Ph.D. (University of Nebraska-Lincoln)- food science and technology; K. Vaillancourt, Ph.D. (Virginia Tech University)– family studies

Cooperative Extension Service *L. Banegas-Carreon, M.P.H. (New Mexico State University)- public health; W. Fedio, Ph.D. (University of Alberta-Canada)– food microbiology; N. Flores, Ph.D. (Kansas State University)– food science; B. Jorgensen, Ph.D. (Virginia Tech University)– family studies; S. Koukel, Ph.D. (Texas Tech University)– family and consumer sciences education; K. Martinez, Ph.D. (New Mexico State University)- educational leadership and administration; L. Olivas, M.Ed. (New Mexico State University)- education/curriculum and instruction; K. Plawecki, Ph.D. (University of Illinois)- nutritional sciences; L. Sabillon Galeas, Ph.D. (University of Nebraska-Lincoln)- food science and technology; C. Vanderpool, M.S. (University of New Mexico)- nutrition*

Clothing, Textiles & Fashion Merchandising

CTFM 1110. Fundamentals of Fashion
3 Credits (3)
Survey of the fashion business from fiber to end product.
Learning Outcomes
1. Describe the roles and functions of industry jobs and sectors involved in the designing, production, marketing, and distribution of fashion brands within the global context.
2. Describe the business strategies of industry sectors involved in the designing, production, marketing, and distribution of fashion brands within the global context.
3. Describe the interrelationships among line planning, line development, and line presentation at manufacturing and retail levels.
4. Provide examples of the fashion industry's environmental and social impact.
5. Learn about all career tracks involved in the fashion industry and the global fashion supply chain.
6. Synthesize industry-relevant information on current issues in the fashion industry.

CTFM 2120. Fashion Illustration
3 Credits (1+4P)
This course explores aspects of fashion illustration, from drawing basic fashion figures to producing finished professional illustrations in color. This course provides the opportunity for students to integrate their fashion design development with computer-aided systems. The emphasis is on fashion innovation and concept design exploration enhanced by computer applications. May be repeated up to 3 credits.. Prerequisites: ARTS 1145G and CTFM 1110
Learning Outcomes
1. To learn Adobe Illustrator and Adobe Photoshop as drawing and design tools for electronic design and rendering.
2. To understand and utilize the computer as a tool for fashion design.
3. To understand methods of design input, including scanning, digitizing and resizing.
4. To develop customer profiles
5. To Understand Concept Style

CTFM 2130. Concepts in Apparel Construction
3 Credits (1+4P)
Students are introduced to professional standard sewing techniques and apparel construction. The techniques learned are applied to produce finished garments. Restricted to: FCSE,CTFM majors. Restricted to Las Cruces campus only.
Learning Outcomes
1. Define sewing construction terminology, equipment and sewing machine parts.
2. Learn to select suitable patterns and fabrics for garments.
3. Learn to alter commercial patterns for different body types.
4. Identify fabric types, finishes, and labeling.
5. Perform standard operating procedures on sewing machines.
6. Perform clothing construction techniques for various garments.
7. Apply knowledge of industry sewing methods to recognition of garment workmanship.

CTFM 2990. 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. Restricted to: CTFM majors. Restricted to Las Cruces campus only.
Learning Outcomes
1. Gain hands-on knowledge of the fashion industry.
2. Demonstrate the ability to analyze the practices of management, as observed in the industry.
3. Demonstrate an attitude that is appropriate for a prospective manager in the industry.
4. Demonstrate the understanding of, and the ability to use research and problem solving methods to develop, analyze, and present a critical incident analysis.

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 1110; CTFM 2120.

CTFM 365. Apparel Analysis
3 Credits (3)
An in-depth investigation of the development, production and comparison of wearing apparel. Focus on the structural, functional and decorative aspects of apparel. Emphasis on sourcing of companies and materials, costing of the product line, comparing design and manufacturing techniques that affect price, quality, and size of apparel. Restricted to: CTFM majors.
Prerequisite(s): CTFM 1110 and CTFM 2130.

CTFM 366. Historic Fashion
3 Credits (3)
The study of clothing styles from 3500 BC through the 20th century. Restricted to: CTFM majors.
Prerequisite(s): CTFM 2120.

CTFM 371. Textile Science
3 Credits (1+4P)
The study of fiber characteristics, fabric properties and the manufacturing processes that affect the selection, use, and care of textile goods. Restricted to: CTFM majors.
Prerequisite(s): CTFM 1110.

CTFM 372. Fashion Merchandising
3 Credits (3)
A study of the processes required to bring consumer goods to the marketplace.
Prerequisite(s): CTFM 1110 and CTFM 2130.

CTFM 373. Advanced Apparel Construction II
3 Credits (1+4P)
This course builds on Basics of Apparel Construction and explores the application of advanced sewing technology across a range of fashion products. Restricted to: CTFM majors.
Prerequisite(s): CTFM 2130.

CTFM 375. Fashion Buying
3 Credits (3)
The application of planning, purchasing and controlling inventories using industry data and analytics. Includes merchandising math with an emphasis on product selection and pricing.
Prerequisite(s): ACCT 2110, CTFM 1110, and CTFM 2130.

CTFM 377. Fashion Study Tour
1-3 Credits (1-3)
Study of international/domestic fashion, designers, manufacturers, merchandisers and/or retailers. May be repeated up to 6 credits. Consent of Instructor required.

CTFM 401. Professional Development
1 Credit (1)
Introduction to the field experience including resume writing, interviewing skills, understanding business ethics and etiquette. Also includes a discussion of career paths and advice from industry guest speakers. Restricted to: CTFM majors.
Prerequisite(s): CTFM 372 and CTFM 375.

CTFM 402. Field Experience
1-3 Credits (1-3)
Practical experience in fashion, clothing design, manufacturing, merchandising, or retailing. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: CTFM majors.
Prerequisite(s): CTFM 401.

CTFM 403. Post-Field Experience
1 Credit (1)
A case based approach to analyzing internship experiences. Students will share their experiences and prepare case studies about specific business issues they encountered during CTFM 402. Restricted to: CTFM majors.
Prerequisite(s): CTFM 402.

CTFM 460. Cultural Perspectives in Dress
3 Credits (3)
Explores the social, psychological and cultural aspects of dress and appearance. Consent of Instructor required.

CTFM 473. Flat Pattern for Apparel Design
3 Credits (1+4P)
Applied design principles to flat patterns techniques including bodies, skirts, sleeves, neckline, and bodies-sleeve combinations. Projects will require three-dimensional approaches in apparel design. Restricted to: CTFM majors.
Prerequisite(s): CTFM 2120 and CTFM 373.

CTFM 474. Fashion Promotion
3 Credits (3)
A comprehensive examination of promotion in the merchandising environment of fashion related goods. Restricted to: CTFM majors.
Prerequisite(s): CTFM 372.

CTFM 476. Draping for Apparel Design
3 Credits (1+4P)
Development of garment shapes using draping techniques. Emphasis placed on torso development, contouring principles and desgin development on the form. This course exposes the student to the design process, from initial concept and muslin sample development to final execution of the finished garments. Restricted to: CTFM majors.
Prerequisite(s): CTFM 2120 and CTFM 373.

CTFM 477. Capstone in Fashion Mechandising
3 Credits (3)
Synthesizes previous coursework. Students apply multi-disciplinary principles to the analysis of fashion merchandising case studies and industry related challenges.
Prerequisite(s): CTFM 372, CTFM 375 and CTFM 402.

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)
The study of fiber characteristics, fabric properties and the manufacturing processes that affect the selection, use and care of textile goods. Students will be required to complete additional assignments beyond what is required for CTFM 371.

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 Studies Courses

FCST 1130. Interpersonal Skills in Intimate Relationships
3 Credits (3)
Developing social skills within friendships, dating relationships, marriage, parenting, and families.
Learning Outcomes
1. To understand several theories that explain why some people have healthy interpersonal relationships while others do not.
2. To gain insight about one's self.
3. To learn and improve upon selected relationship skills that improve quality of life.
4. To learn skills that improve interpersonal relationships

FCST 2110. Infancy Through Middle Childhood in the Family
3 Credits (3)
This course discusses research and theory relevant to prenatal development and the physical, mental, and socio- emotional development of the child from birth through age 12. This developmental period will be

examined across different cultures and in real world contexts. Attitudes, knowledge, and skills needed for working with young children and their families will be introduced. Restricted to Las Cruces campus only.

Learning Outcomes

1. Evaluate how genes and the environment interact to impact human development from prenatal stages through age twelve.
2. Assess the effects of environmental influences on the developing fetus.
3. Discuss the capacities of newborn development through age twelve.
4. Evaluate how individuals and couples change during the transition to parenthood.
5. Analyze the physical, cognitive, and social-emotional development of the child from birth through age twelve.

FCST 2135. Adolescent Development and the Family
3 Credits (3)

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.

Learning Outcomes

1. Compare adolescents of today with adolescents of the past.
2. Describe the physical, cognitive, and psychosocial development of the adolescent in the family system and evaluate individual differences in development.
3. Compare and contrast ways in which culture impacts adolescent development.
4. Assess effective parenting strategies with adolescents.
5. Analyze the influence of family, peers, school, and work on adolescent development.

FCST 2140. Adult Development and Aging
3 Credits (3)

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.

Learning Outcomes

1. Compare and contrast theories of adult development and aging and apply theories to adult behavior.
2. Distinguish the similarities and differences of physical, emotional, cognitive, and psychosocial aspects of adult development.
3. Describe multicultural factors that impact attitudes toward aging and coping with aging family members.
4. Evaluate ways in which special issues (including but limited to Alzheimer's Disease, heart disease, end of life issues) impact aging.
5. Devise a conceptualization of one's own perspective in dealing with aging and aging family members.

FCST 3110V. Introduction to Child Advocacy
3 Credits (3)

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. May be repeated up to 3 credits.

Learning Outcomes

1. To understand how to apply a model of critical thinking/analysis to child maltreatment issues using a systems framework.
2. Compare and contrast historical trends in child maltreatment an child advocacy.
3. Analyze individual, family and community risk factors for maltreatment.
4. Explain cultural issues related to assessing and working with diverse families.

FCST 3120V. Family Ethnicities and Subcultures
3 Credits (3)

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. May be repeated up to 3 credits.

FCST 3210. Family Resource Management
3 Credits (3)

This course provides an understanding of the decision-making process of families concerning the utilization of financial, personal, environmental, and social resources. In particular, the class will focus on how families develop, exchange, and allocate resources throughout the lifespan with the expectation that the most effective resource management decisions are made from positions of knowledge and understanding. May be repeated up to 3 credits.

FCST 3220. Family Dynamics
3 Credits (3)

The dynamics of family relationships and changes influencing contemporary families. Interaction between the family and other social systems will be examined. Open to nonmajors. May be repeated up to 3 credits.

FCST 3230. Parenting and Child Guidance
3 Credits (3)

Theories, principles, and skills essential for parents and professionals in guiding children within the family system. Problem prevention techniques are stressed. May be repeated up to 3 credits.

FCST 4310. Community Programs in Family Life
3 Credits (3)

The purpose of this course is for students to learn through class lectures, readings, and community based activities, about issues related to the formulation, delivery, and evaluation of family life education programs in the local community and through virtual delivery. Students will also learn about conducting needs assessments in the community, and evaluating programs after their implementation in preparation for jobs in the field of Family Science.

Learning Outcomes

1. Identify conceptual frameworks suitable in the development of family life programs.
2. Demonstrate knowledge and understanding of techniques and strategies useful in the delivery of family life education programs.
3. Conduct needs assessments and critiques of existing family life/parent education programs and methods of delivering information to parents and families.
4. Apply evaluation strategies for analyzing program effectiveness.
5. Demonstrate knowledge of the legal, moral, and ethical dimensions of family life education and certification standards.

FCST 4997. 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. May be repeated up to 6 credits.

FCST 4998. Field Experience: Issues and Ethics
3 Credits (3)
Supervised work experience in community agencies providing services to family systems. Discussion of professional issues and ethical dilemmas. A total of 6 credits must be taken. Restricted to: FCS majors. Students must be in junior standing to enroll. May be repeated up to 6 credits.
Prerequisite: FCST 3220 or equivalent, and an overall GPA of at least 2.5.
Learning Outcomes
1. Upon completion of this course students will be able to integrate learning into applied settings.

FCST 5120. Family Ethnicities and Subcultures
3 Credits (3)
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 FCST 449V plus additional work. May be repeated up to 3 credits.

FCST 5140. Adult Development and Aging
3 Credits (3)
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. May be repeated up to 3 credits.

FCST 5210. Family Law and Ethics
3 Credits (3)
Study of selected aspects of federal and state laws and ethical issues as they relate to the family system.

FCST 5220. The Business and Practice of Marriage and Family Therapy
1 Credit (1)
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. Graded: S/U Grading (S/U, Audit).

FCST 5230. Parenting and Child Guidance
3 Credits (3)
Theories, principles, and skills essential for parents and professionals in guiding children within the family system. Problem prevention techniques are stressed.

FCST 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.

FCST 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.

FCST 5310. Family Dysfunction and Diagnosis
3 Credits (3)
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).

FCST 5320. Theories of Marriage and Family Therapy
3 Credits (3)
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.

FCST 5330. Strategies in Family Therapy
3 Credits (3)
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.

FCST 5340. The Family System
3 Credits (3)
Contemporary family interaction: concepts, composition, resource and environment.

FCST 5410. Sexuality and Family Dynamics
3 Credits (3)
Psychosocial and physiological aspects of human sexuality from a life span and family systems perspective.

FCST 5420. Contemporary Marriage and Family Issues
3 Credits (3)
Investigation of one of the following topics each semester: dual career marriages, nontraditional relationships, aged in marriage.

FCST 5430. Family Crises and Rehabilitation
3 Credits (3)
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.

FCST 548. Adult Development and Aging
3 Credits (3)
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. May be repeated up to 3 credits.

FCST 549. Family Ethnicities and Subcultures
3 Credits (3)
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 FCST 449V plus additional work. May be repeated up to 3 credits.

FCST 562. The Business and Practice of Marriage and Family Therapy
1 Credit (1)
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. Graded: S/U Grading (S/U, Audit).

FCST 572. Family Dysfunction and Diagnosis
3 Credits (3)
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).

FCST 582. Theories of Marriage and Family Therapy
3 Credits (3)
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.

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

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

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

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

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

FCST 589. Family Crises and Rehabilitation
3 Credits (3)
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.

FCST 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.

FCST 592. Strategies in Family Therapy
3 Credits (3)
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.

FCST 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.

FCST 599. Master's Thesis
15 Credits
Thesis

FCST 5990. 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.

FCST 5991. 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.

FCST 5996. 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.

FCST 5998. 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.

FCST 5999. Master's Thesis
15 Credits
Thesis

Family and Consumer Science Courses

FCSC 2250. Overview of Family and Consumer Sciences Teaching
3 Credits (3)
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.
Learning Outcomes
1. Explain the foci of FCS—past, present and future.
2. Begin to develop a professional role in FCS.
3. Formulate a personal philosophy of FCS, and of teaching.
4. Explain the teaching process.
5. Give examples of roles, responsibilities and qualities of effective and ethical teachers.
6. Assess the characteristics, backgrounds, and needs of learner audiences.
7. Explain various learning theories/principles.
8. Illustrate how various input factors influence teaching decisions.
9. Plan a researched based student-centered lesson with a learning activity in a FCS content area. 1
10. Give examples of ways to evaluate learner growth.1
11. Present a FCS content-based lesson effectively to learners using PowerPoint presentation software and a selected teaching method. 1
12. Evaluate one's own teaching and the teaching of others. 1
13. Exhibit increased confidence in one's abilities as a teacher/educator.1
14. Exhibit excitement about assuming the teacher/educator role.

FCSC 2330. Housing and Interior Design
3 Credits (3)
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.
Learning Outcomes
1. Differentiate between different architectural designs (i.e., Cape Cod, contemporary, craftsman, ranch, southern colonial, Spanish,

Victorian, pueblo, New Mexican territorial, and territorial revival) and be able to identify historical, cultural, demographic, geographical, and environmental influences on style and aesthetics.
2. Analyze the fundamentals of housing for all families and cultures and understand the role housing plays in the ecological model of human ecology.
3. Define elements of design as related to housing and interiors (i.e., color, form, line, space texture).
4. Define principles of design as related to housing and interiors (i.e., balance emphasis, harmony, proportion, unity).
5. Compare and contrast the different periods of interior design from the 20th century to the present.
6. Analyze the influence of historical and cultural factors in the development of current interior trends.
7. Select and arrange interiors that are functional and aesthetically pleasing to designated interior design situations.
8. Identify, describe and make application of textiles as related to various furniture and interior design styles.
9. Design a three-dimensional tiny house or an interior space, using all concepts learned.

FCSC 3110. Management Concepts in Family and Consumer Sciences Teaching
3 Credits (3)
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. May be repeated up to 3 credits.

FCSC 4110. Teaching in Informal Family and Consumer Sciences Settings
3 Credits (3)
Learning principles and theories with application in informal family and consumer sciences education situations. Includes supervised experience in use of teaching strategies. May be repeated up to 3 credits.
Prerequisite: overall GPA of at least 2.5 or consent of instructor.

FCSC 4120. Career and Technical Education Programs
3 Credits (3)
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.

FCSC 4510. Teaching Methods I for Family and Consumer Sciences
3 Credits (3)
Methods and strategies for teaching Family & Consumer Sciences content in middle and secondary schools. Organization and development of curriculum. May be repeated up to 3 credits.
Prerequisite: FCSC 2250 and FCSC 3110 and an overall GPA of 2.75, admitted to FCSE program; completion of NES Essential Basic Skills Tests I, II, & III.
Corequisite: FCSC 4120.

FCSC 4520. Teaching Methods II for Family and Consumer Sciences
3 Credits (3)
Planning, preparation, and strategies for teaching family and consumer sciences in middle and secondary schools. Preparation for employment. May be repeated up to 3 credits. Restricted to: FCSE majors.
Prerequisite: FCSC 4510; overall GPA of 2.75,admitted to program.

FCSC 4810. Supervised Teaching in Family and Consumer Sciences
12 Credits (12)
Seventy (70) days of full-time supervised teaching in selected middle or secondary schools. May be repeated up to 12 credits. Restricted to: FCSE majors.
Prerequisite: FCSC 4510, an overall GPA of 2.75, and admitted to FCSE Program.
Corequisite: FCSC 4520.

FCSC 4815. Research Methods in Family and Consumer Sciences
3 Credits (3)
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. May be repeated up to 3 credits.

FCSC 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.

FCSC 4997. 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.

FCSC 500. Research Methods
3 Credits (3)
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 547. Graduate Study in Teaching Methods II
3 Credits (3)
Planning, preparation, and strategies for teaching family and consumer sciences in the secondary schools. Additional assignments beyond FCSC 447 required for students registering in FCSC 547.

FCSC 548. Graduate Study in Supervised Teaching in Family and Consumer Sciences
12 Credits (70P)
Seventy of full-time, supervised teaching in selected schools. Additional assignments beyond FCSC 448 required for students registering in FCSC 548. Consent of Instructor required.
Prerequisite(s): FCSC 446 or FCSC 546, and consent of instructor.

FCSC 5815. Research Methods
3 Credits (3)
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 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.

FCSC 5991. 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. May be repeated up to 4 credits.

FCSC 5996. 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.

FCSC 5999. Master's Thesis
1-15 Credits
May be repeated up to 88 credits.

Food Science and Technology Courses

FSTE 1120. ACES in the Hole Foods I
4 Credits (4)
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. Students enrolled in this class must possess A Food Handler Card
Learning Outcomes
1. Apply basic scientific principles, procedures, techniques and standards in the production of food products.
2. Apply principles of sanitation and safety to the production of food products.
3. Assist in the development and evaluation of new and/or existing food products made for human consumption.
4. Prepare a resume and portfolio

FSTE 2110G. 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.
Learning Outcomes
1. Explain basic scientific principles involved in the preparation of high quality food products.
2. Utilize scientific inquiry in the experimental investigation of factors influencing the chemical, physical and sensory properties of food products.
3. Apply basic scientific principles, procedures, techniques and standards in the preparation of all types of high quality food products.
4. Use basic methods of quantitative analysis to critically evaluate quality characteristics of food.
5. Use sensory science techniques and terminology to critically evaluate acceptability and quality characteristics of food.
6. Describe high quality characteristics of a variety of food products using appropriate terminology.
7. Apply principles of sanitation and safety to food preparation.

FSTE 2120. ACES in the Hole Foods II
4 Credits (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. Student must also have a Food Handler Card to enroll in this course.
Prerequisite(s): FSTE 1120.
Learning Outcomes
1. Apply basic scientific principles, procedures, techniques and standards in the production of food products.
2. Apply principles of sanitation and safety to the production of food products.
3. Assist in the development and evaluation of new and/or existing food products made for human consumption.
4. Prepare a resume and portfolio

FSTE 2130G. Survey of Food and Agricultural Issues
3 Credits (3)
Survey of food and agricultural issues, including: geography of food production and consumption; human-agricultural-natural resource relations; agriculture in the United States and abroad; modern agribusiness; food safety; food, agriculture, and natural resources policy; ethical questions; role and impact of technology. Crosslisted with AEEC 2130G.
Learning Outcomes
1. Understand of global agriculture including production techniques used in various geographical regions, consumption trends, and political and social constraints.
2. Synthesis information about agricultural issues and make informed arguments
3. Articulately discuss modern issues in agriculture
4. Write coherent arguments relative to personal beliefs regarding agricultural issues

FSTE 2996. 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.
Learning Outcomes
1. Varies

FSTE 3110. Professional Development in Food Science
1 Credit (1)
Covers essential elements of career management including preparation for a successful internship. Students must have a Food Handler Card. Restricted to: FSTE majors. Graded S/U.
Prerequisite: FSTE 2120.
Learning Outcomes
1. Describe their Jung Type.
2. Articulate their personal mission.
3. Identify their personal strengths and weaknesses.
4. Establish short and long term career goals.
5. Prepare an effective cover letter.
6. Develop a professional resume.
7. Understand the dos and dont's of interviewing.
8. Properly dress for interviewing.
9. Understand the factors to consider when deciding what job offer to accept. 1
10. Understand the objectives and requirements of the Food Science internship program.

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 2610G and BIOL 2610L), or (BIOL 2110G and BIOL 2110L)

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 1215G 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): FSTE 2110G.

FSTE 340. Cereal Technology
3 Credits (2+2P)
This course provides students with an understanding of chemistry and technology of the cereal grains. The course is structured as a combination of theory, demonstrations, and practical laboratory exercises on the fundamentals of cereal processing. Students will learn about post-harvest processing and utilization of major cereal grains for food and feed, current industrial processes and practices, and the theoretical basis for these operations.
Learning Outcomes
1. Understand principles of cereal chemistry and processing.
2. Understand how cereal grains are produced, stored, marketed, and converted into food products.
3. Describe unit operations and procedures involved in the manufacture of cereal-based food and animal feed products.

FSTE 350. Dairy Technology
3 Credits (2+2P)
This course provides general knowledge on dairy technology as well as on various processing technologies regarding the science behind a variety of dairy products. It is designed to give a thorough understanding of the composition and properties of milk, and of the physical and chemical changes occurring in milk during processing and storage. These products include fluid milk, fermented dairy products, concentrated and dried dairy products, butter, cream and various frozen dairy desserts. Principles and practices in assembling, receiving, processing, and packaging milk and dairy products, including beverage, frozen, cream, butter, concentrated and fractionated milks, dried milks, casein, and lactose.
Prerequisite: FSTE 2110G.
Learning Outcomes
1. To gain an understanding of dairy processing technologies, unit operation and production of dairy products and ingredients.
2. To understand the principles of processing of dairy products by integrating the concepts of chemistry, biochemistry, microbiology, nutrition, sensory properties, and engineering relevant to dairy processing operations.
3. To gain an ability to think critically on practical problems that occur in the dairy industry and to appreciate the many challenges in dairy research technology and dairy product development.
4. To engage in group discussion on current issues pertinent to culture dairy industry.

FSTE 375. Professional Development in Food Science
1 Credit (1)
Covers essential elements of career management including preparation for a successful internship.students must have a Food Handler Card. Restricted to: FSTE majors. Graded S/U.
Prerequisite: FSTE 2120.
Learning Outcomes
1. Describe their Jung Type.
2. Articulate their personal mission.
3. Identify their personal strengths and weaknesses.
4. Establish short and long term career goals.
5. Prepare an effective cover letter.
6. Develop a professional resume.
7. Understand the dos and dont's of interviewing.
8. Properly dress for interviewing.
9. Understand the factors to consider when deciding what job offer to accept. 1
10. Understand the objectives and requirements of the Food Science internship program.

FSTE 4110. 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 2610G and BIOL 2610L), or (BIOL 2110G and BIOL 2110L)

FSTE 4120. Food Chemistry
3 Credits (3)
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 1215G, CHEM 1225G, and CHEM 2115, or consent of instructor.

FSTE 4130. 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): FSTE 2110G.

FSTE 4140. 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 1215G or consent of instructor.

FSTE 4150. Food Safety
3 Credits (3)
Provide students' knowledge on good manufacturing practices and prequisite programs, conduct hazard analysis and determine preventive controls, define process, food allergen, sanitation and supply-chain preventive controls and discuss verification validation, recall and recordkeeping requirements with training and educational opportunities related to current best practices and guidane, and future regulatory requirements by establishing the Produce Safety Alliance. Students participate in a Mock Audit. Participants will receive an official FSPCA Preventive Controls Qualified Individual certificate issues by AFDO after attending this training program.

Prerequisite(s): FSTE 4110 or BIOL 311, or consent of instructor.

FSTE 421. Food Chemistry
3 Credits (3)
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 1215G, CHEM 1225G, and CHEM 2115, or consent of instructor.

FSTE 4210. Cereal Technology
3 Credits (2+2P)
This course provides students with an understanding of chemistry and technology of the cereal grains. The course is structured as a combination of theory, demonstrations, and practical laboratory exercises on the fundamentals of cereal processing. Students will learn about post-harvest processing and utilization of major cereal grains for food and feed, current industrial processes and practices, and the theoretical basis for these operations.
Learning Outcomes
1. Understand principles of cereal chemistry and processing.
2. Understand how cereal grains are produced, stored, marketed, and converted into food products.
3. Describe unit operations and procedures involved in the manufacture of cereal-based food and animal feed products.

FSTE 4220. Dairy Technology
3 Credits (2+2P)
This course provides general knowledge on dairy technology as well as on various processing technologies regarding the science behind a variety of dairy products. It is designed to give a thorough understanding of the composition and properties of milk, and of the physical and chemical changes occurring in milk during processing and storage. These products include fluid milk, fermented dairy products, concentrated and dried dairy products, butter, cream and various frozen dairy desserts. Principles and practices in assembling, receiving, processing, and packaging milk and dairy products, including beverage, frozen, cream, butter, concentrated and fractionated milks, dried milks, casein, and lactose.
Prerequisite: FSTE 2110G.
Learning Outcomes
1. To gain an understanding of dairy processing technologies, unit operation and production of dairy products and ingredients.
2. To understand the principles of processing of dairy products by integrating the concepts of chemistry, biochemistry, microbiology, nutrition, sensory properties, and engineering relevant to dairy processing operations.
3. To gain an ability to think critically on practical problems that occur in the dairy industry and to appreciate the many challenges in dairy research technology and dairy product development.
4. To engage in group discussion on current issues pertinent to culture dairy industry.

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 4230. 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.

FSTE 4240. Processed Meats
3 Credits (2+2P)
This course provides students with an understanding of physical, chemical and functional characteristics of meat raw materials. Modern meat processing industry and its use of science and technology. The fabrication, processing, preservation, sanitation, food safety, ethnic evolvement, and utilization of manufactured and processed meat. Regulatory compliance and quality assurance in commercial processed meat operations.
Learning Outcomes
1. The theory and chemistry of meat processing.
2. Processing techniques and basic formulations of different categories of processed meats.
3. The effect of type and composition of raw materials and added ingredients on processed meat quality and safety.
4. To evaluate products for consumer and analytical quality and composition.
5. To evaluate and assess defective products and propose processing/ingredient solutions.

FSTE 425. Sensory Evaluation of Foods and Product Development
3 Credits (2+2P)
Application of affective sensory tests, chemical, physical, and experimental methods to the development and evaluation of a food product. Sensory test methods and procedures used to evaluate the flavor, color and texture of foods. Relationships between sensory and instrumental measurements quality parameters. The course will present the parametric and non-parametric tests that are used in sensory evaluation. May be repeated up to 3 credits.
Prerequisite: FSTE 2110G and (A ST 311 or MATH 1350G).
Learning Outcomes
1. Describe the chemical senses and the receptors that mediate the basic taste modalities.
2. Match sensory tests to research questions and to use the suitable statistical tests.
3. Design and develop a food product and conduct a basic research project.
4. Communicate research results using written, oral, and visual communication techniques.

FSTE 4250. Sensory Evaluation of Foods and Product Development
3 Credits (2+2P)
Application of affective sensory tests, chemical, physical, and experimental methods to the development and evaluation of a food product. Sensory test methods and procedures used to evaluate the flavor, color and texture of foods. Relationships between sensory and instrumental measurements quality parameters. The course will present the parametric and non-parametric tests that are used in sensory evaluation. May be repeated up to 3 credits.
Prerequisite: FSTE 2110G and (A ST 311 or MATH 1350G).

Learning Outcomes

1. Describe the chemical senses and the receptors that mediate the basic taste modalities.
2. Match sensory tests to research questions and to use the suitable statistical tests.
3. Design and develop a food product and conduct a basic research project.
4. Communicate research results using written, oral, and visual communication techniques.

FSTE 430. Brewing Science & Engineering
3 Credits (3)
Details of beer production, fermentation science, brewery operation, and process design & economics. Engineering considerations including process safety, fermentation kinetics, unit operations, and economies of scale. Beer styles, recipe formulation, product quantification for tax purposes, and brew analytical methods will also be discussed. Students must be 21 years old to enroll. Crosslisted with: FSTE 430.
Learning Outcomes

1. To provide the undergraduate student with a broad perspective of beer and the brewing industry as well as technical knowledge about the brewing process.

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 Foods at NMSU-Experiential Learning
1 Credit (2-8P)
Professional work experience for FSTE majors only.
Prerequisite: FSTE 375.
Learning Outcomes

1. Students will collect a minimum of four hundred hours.

FSTE 476. FSTE Internship Seminar
1 Credit (1)
A case based approach to analyzing internship experiences. Students will write case studies about specific business issues they countered during FSTE 475 (Internship) and analyze them. Restricted to Food Science Technology majors.
Prerequisite: FSTE 475.
Learning Outcomes

1. Analyze business practices as experienced during an internship.
2. Deliver a presentation effectively communicating operations of ACES Foods at NMSU.
3. Assess use of state and federal food regulation agencies within ACES Foods at NMSU.
4. Present in written form the history, business operations, job descriptions, organizational structure, and human resource policies of ACES Foods at NMSU.

FSTE 480. Food Safety
3 Credits (3)
Provide students' knowledge on good manufacturing practices and prequisite programs, conduct hazard analysis and determine preventive controls, define process, food allergen, sanitation and supply-chain preventive controls and discuss verification validation, recall and recordkeeping requirements with training and educational opportunities related to current best practices and guidane, and future regulatory requirements by establishing the Produce Safety Alliance. Students participate in a Mock Audit. Participants will receive an official FSPCA Preventive Controls Qualified Individual certificate issues by AFDO after attending this training program.
Prerequisite(s): FSTE 320 or BIOL 311, or consent of instructor.

FSTE 4815. FSTE Internship Seminar
1 Credit (1)
A case based approach to analyzing internship experiences. Students will write case studies about specific business issues they countered during FSTE 4998 (Internship) and analyze them. Restricted to Food Science Technology majors.
Prerequisite: FSTE 4998.
Learning Outcomes

1. Analyze business practices as experienced during an internship.
2. Deliver a presentation effectively communicating operations of ACES Foods at NMSU.
3. Assess use of state and federal food regulation agencies within ACES Foods at NMSU.
4. Present in written form the history, business operations, job descriptions, organizational structure, and human resource policies of ACES Foods at NMSU.

FSTE 490. Processed Meats
3 Credits (2+2P)
This course provides students with an understanding of physical, chemical and functional characteristics of meat raw materials. Modern meat processing industry and its use of science and technology. The fabrication, processing, preservation, sanitation, food safety, ethnic evolvement, and utilization of manufactured and processed meat. Regulatory compliance and quality assurance in commercial processed meat operations.
Learning Outcomes

1. The theory and chemistry of meat processing.
2. Processing techniques and basic formulations of different categories of processed meats.
3. The effect of type and composition of raw materials and added ingredients on processed meat quality and safety.
4. To evaluate products for consumer and analytical quality and composition.
5. To evaluate and assess defective products and propose processing/ingredient solutions.

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 4996. 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 4997. 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 4998. ACES Foods at NMSU-Experiential Learning
1 Credit (2-8P)
Professional work experience for FSTE majors only.

Prerequisite: FSTE 3110.

Learning Outcomes

1. Students will collect a minimum of four hundred hours.

FSTE 5110. 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 2610G/2610L, or BIOL 2110G/2110L, or consent of instructor.

FSTE 5120. Food Chemistry
3 Credits (3)
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 1215G, CHEM 1225G, and CHEM 2115, or consent of instructor.

FSTE 5130. Food Preservation
3 Credits (3)
Processes used in home and commercial food preservation, including canning, freezing, drying, and irradiation. Same as FSTE 4130 with additional work required at the graduate level.

FSTE 5140. 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 1215G or consent of instructor.

FSTE 5150. Rumen Microbiology (so)
3 Credits (3)
Same as ANSC 560.

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 2610G/2610L, or BIOL 2110G/2110L, or consent of instructor.

FSTE 521. Graduate Study in Food Chemistry
3 Credits (3)
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 1215G, CHEM 1225G, and CHEM 2115, or consent of instructor.

FSTE 5210. Cereal Technology
3 Credits (2+2P)
This course provides students with an understanding of chemistry and technology of the cereal grains. The course is structured as a combination of theory, demonstrations, and practical laboratory exercises on the fundamentals of cereal processing. Students will learn about post-harvest processing and utilization of major cereal grains for food and feed, current industrial processes and practices, and the theoretical basis for these operations.

Learning Outcomes

1. Understand principles of cereal chemistry and processing.
2. Understand how cereal grains are produced, stored, marketed, and converted into food products.
3. Describe unit operations and procedures involved in the manufacture of cereal-based food and animal feed products.

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 5230. 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 4230 required at the graduate level.

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 2110G and A ST 311 or MATH 1350G.

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 1215G or consent of instructor.

FSTE 5250. 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 2110G and A ST 311 or MATH 1350G.

FSTE 531. Food Preservation
3 Credits (3)
Processes used in home and commercial food preservation, including canning, freezing, drying, and irradiation. Same as FSTE 331 with additional work required at the graduate level.

FSTE 5310. 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 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 540. Cereal Technology
3 Credits (2+2P)
This course provides students with an understanding of chemistry and technology of the cereal grains. The course is structured as a combination of theory, demonstrations, and practical laboratory exercises on the fundamentals of cereal processing. Students will learn about post-harvest processing and utilization of major cereal grains for food and feed, current industrial processes and practices, and the theoretical basis for these operations.

Learning Outcomes

1. Understand principles of cereal chemistry and processing.
2. Understand how cereal grains are produced, stored, marketed, and converted into food products.
3. Describe unit operations and procedures involved in the manufacture of cereal-based food and animal feed products.

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

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.

FSTE 5997. 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.

FSTE 600. Special Research Program
1-6 Credits (1-6)
Special research for doctoral students May be repeated up to 6 credits. Consent of Instructor required.
Prerequisite(s): Consent of instructor.

FSTE 601. Cooperative Extension Service Field Experience
1-3 Credits (1-3)
This course will provide students with knowledge and experience in community outreach through the cooperative extension service. This course is required for students pursuing a Ph.D. in FSHN. Students will work collaboratively with extension faculty on applied projects. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: FSHN majors.

FSTE 605. Doctoral Seminar
1 Credit (1)
Current topics and research in Food Science and Human Nutrition. Course will include experts from the field as guest speakers. Students will have the opportunity to present their doctoral proposals and/or research findings.

FSTE 6910. Doctoral Seminar
1 Credit (1)
Current topics and research in Food Science and Human Nutrition. Course will include experts from the field as guest speakers. Students will have the opportunity to present their doctoral proposals and/or research findings.

FSTE 698. Doctoral Reserach
1-6 Credits (1-6)
Research May be repeated up to 6 credits. Consent of Instructor required.

FSTE 6991. Doctoral Research
1-6 Credits (1-6)
Research May be repeated up to 6 credits. Consent of Instructor required.

FSTE 6997. Special Research Program
1-6 Credits (1-6)
Special research for doctoral students May be repeated up to 6 credits. Consent of Instructor required.
Prerequisite(s): Consent of instructor.

FSTE 6998. Cooperative Extension Service Field Experience
1-3 Credits (1-3)
This course will provide students with knowledge and experience in community outreach through the cooperative extension service. This course is required for students pursuing a Ph.D. in FSHN. Students will work collaboratively with extension faculty on applied projects. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: FSHN majors.

FSTE 700. Doctoral Dissertation
1-12 Credits (1-12)
Dissertation May be repeated up to 18 credits. Consent of Instructor required.
Prerequisite(s): Passed the qualifying exam and comprehensive exam.

FSTE 7000. Doctoral Dissertation
1-12 Credits (1-12)
Dissertation May be repeated up to 18 credits. Consent of Instructor required.
Prerequisite(s): Passed the qualifying exam and comprehensive exam.

Nutrition Courses

NUTR 2110. Human Nutrition
3 Credits (3)
This course provides an overview of nutrients, including requirements, digestion, absorption, transport, function in the body and food sources. Dietary guidelines intended to promote long-term health are stressed.

Learning Outcomes

1. Evaluate sources of nutrition information for reliability
2. Identify elements of a nutritious diet
3. Describe the digestion, transport, and absorption of nutrients
4. Describe the importance of nutrition in weight control and health
5. Identify nutritional needs as they relate to the life cycle and performance
6. Describe behavior modification techniques that promote good health
7. Evaluate popular nutrition trends for scientific accuracy and effectiveness
8. Develop skills in the planning and assessing of healthy meal plans

9. Describe the role of food choices in the development of chronic disease 1
10. Describe the role of food in the promotion of a healthful lifestyle

NUTR 2120. Seminar I - Becoming a Nutrition Professional
1 Credit (1)
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.
Learning Outcomes
1. Describe career options within the fields of Nutrition Dietetics.
2. Outline the HNDS field experience process.
3. Explain the educational pathways in HNDS.
4. List requirements for admission into the HNDS Dietetics pathway.
5. Begin an HNDS student portfolio.
6. Discuss the importance of personal responsibility accountability

NUTR 3110. Nutrition Throughout the Lifecycle
3 Credits (3)
Relationship of the stages of the human life cycle to changes in nutrient need. Consent of Instructor required.
Prerequisite(s): NUTR 2110.
Learning Outcomes
1. Understand the value of collaborative work in nutrition care of individuals.
2. Compare and contrast the physiological, behavioral, and psychosocial factors associated with each life stage that affect nutritional status.
3. For each life cycle stage, create a nutritionally adequate menu that meets key nutrient needs.
4. Culturally appropriate evidence-based interventions to address common nutrition-related conditions experienced in each lifecycle stage.
5. Utilize the Nutrition Care Process to complete a nutrition assessment.

NUTR 3710. Food Systems & Policy in Dietetics
3 Credits (3)
This course introduces students to food and nutrition policy issues, institutions, and stakeholders and their impacts on public health, sustainability, and the practice of dietetics in the US. The course will examine policy development and the roles of federal agencies, private firms, non-governmental organizations, and the media in food and nutrition policy. It will also examine international perspectives on food and nutrition policies and programs used to support global nutrition, health promotion, and wellness.
Prerequisite(s): Junior standing, NUTR 3110, NUTR 3120.
Learning Outcomes
1. Discuss the economic, political, social, and cultural factors that influence US food and nutrition policies and impact national food systems and population health.
2. Identify the psychological, social, cultural, and environmental factors that influence food choices, eating behaviors, and nutrition-related practices.
3. Describe the processes and major players involved in US food and nutrition policy development, implementation, monitoring/evaluation, and regulation.
4. Recognize the influence of food and nutrition policy on the practice of dietetics.

NUTR 3750. Applied Nutrition Research
3 Credits (3)
This course will introduce students to various types of nutrition research and equip them to locate and critique nutrition and dietetics research articles. Research analysis skills will then be applied to a review of the current literature on a nutrition topic and applied to dietetics practice. May be repeated up to 3 credits.
Prerequisite: MATH 1350G (OR A ST 311); NUTR 3110.
Learning Outcomes
1. Recall the various research methods, study designs, and statistical analyses used in nutrition research.
2. Compare and contrast research methods and analyses in nutrition research.
3. Analyze nutrition research for appropriateness of the methods and analyses.
4. Evaluate nutrition research to form sound, ethical conclusions and practice recommendations.

NUTR 3996. Special Topics
1-4 Credits (1-4)
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. May be repeated up to 9 credits. Consent of Instructor required.
Prerequisite(s): Junior or Senior standing, consent of instructor.
Learning Outcomes
1. Develop foundational knowledge in a specialized area of dietetics practice.

NUTR 4110. Advanced Nutrition
3 Credits (3)
Application of biochemistry and physiology to nutrition. May be repeated up to 3 credits. Prerequisite(s): BIOL 2221, (OR A ST 311); NUTR 3110
Learning Outcomes
1. Describe the processes of digestion and absorption within the human body.
2. Compare and contrast the structure and function of key nutrients.
3. Describe the metabolism of key nutrients under various conditions.
4. Apply concepts of energy and nutrient metabolism to common medical conditions and other relevant situations such as exercising or fasting.

NUTR 4205. Nutrition Communication and Education
3 Credits (3)
In this course, HNDS students learn about the foundation, design, and delivery of nutrition communication and nutrition education. Students will learn ways to develop audience-focused communication and learning assessment. This course will cover the communication methods used in all facets of the nutrition and dietetics field including oral presentations, writing, video, food photography, and food demonstrations. Students will utilize a large variety of channels to communicate and educate different target audiences.
Prerequisite: NUTR 3110.
Learning Outcomes
1. Identify a minimum of four reliable sources of nutrition information.
2. Interpret and clearly communicate evidence-based nutrition information.
3. Evaluate the application of behavior change theories and models to nutrition communications.
4. Adapt nutrition communication and education to target specific cultural and age groups.

5. Develop a nutrition education lesson plan with SMART learning objectives, learning activities, and learning assessments.

NUTR 4207. Nutrition Services
3 Credits (3)
In this course, HNDS Dietetic students will learn about the promotion and payment of nutrition services along with aspects related to reimbursement and partnering with allied professionals. The HNDS Dietetics students will also engage in clinical and community nutrition field experiences. This course will provide HNDS Dietetic students with the opportunity to assess their knowledge of professional competencies within the field of dietetics. Restricted to students with senior standing within the Dietetics Option of the HNDS major.
Learning Outcomes
1. Compare best practice guidelines to actual practice in the provision of nutrition services within community settings.
2. Explain at least two processes in delivering quality food and nutrition services.
3. Identify private and public healthcare funding sources.
4. Explain Medicare, Medicaid, and private payer coverage for medical nutrition therapy.
5. Discuss referrals, primary care partnership and promoting nutrition services.
6. Describe best practices, resources and guidelines related to the reimbursement for nutrition services.
7. Compare best practice guidelines to actual practice in the provision of nutrition services within clinical nutrition settings.
8. Evaluate the content of the Commission on Dietetic Registration RDN credentialing exam.

NUTR 4210. Community Nutrition
3 Credits (3)
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. Same as NUTR 5210.
Prerequisite: NUTR 3110, NUTR 3710.
Learning Outcomes
1. Summarize the components of current national and local community nutrition programs.
2. Explain how national or state level policy influences a community nutrition issue.
3. Write a needs assessment for a community nutrition issue using reliable sources of community nutrition information and data and relevant research.
4. Develop goals and objectives of a nutrition program that address a community nutrition issue.
5. Develop a culturally appropriate nutrition education lesson plan that addresses a specific nutrition program objective.

NUTR 4220. Food Service Organization and Management
3 Credits (3)
Personnel, financial and general management in institutional and commercial food service operations.
Prerequisite: HRTM 2120.
Learning Outcomes
1. Evaluate food products and menu plans through the application of food service management theories and principles.
2. Describe the process of and ethical considerations surrounding purchasing, receiving, storing and controlling inventory of a given food item.
3. Evaluate food system, food safety practices, and scenarios.
4. Evaluate a nutrition and foodservice budget and interpret financial data.

NUTR 4230. Medical Nutrition Therapy I
3 Credits (3)
Special diets and physiological basis for their use. Laws and regulations concerning the practice of dietetics.
Learning Outcomes
1. Examine the role of medical nutritional therapy in disease processes.
2. Apply nutritional assessment techniques utilizing the Nutrition Care Process.
3. Compose nutrition care plans and utilize various styles of medical charting.
4. Describe the interdisciplinary nature of working with a health care team in the delivery of medical nutritional therapy.

NUTR 4230L. Medical Nutrition Therapy I Lab
1 Credit (1P)
Supplements NUTR 4230. Students will perform nutrition assessments, nutrition focused physical exams, apply medical nutrition therapy-based interventions and practice patient discharge education for specific disease states. Elements of pathology and biochemistry of nutrition-related conditions are integrated into course topics. Restricted to: HNDS majors.
Corequisite(s): HNDS 4230.
Learning Outcomes

NUTR 4233. Nutrition Counseling and Education
3 Credits (3)
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.
Prerequisite: NUTR 3110; FCSC 348.
Learning Outcomes
1. Evaluate nutrition counseling strategies tools in promoting behavior change and self-management.
2. Apply behavior change theories and models to nutrition counseling sessions.
3. Develop nutrition care plans for nutrition counseling clients.
4. Analyze professionalism and ethics within nutrition counseling and education.
5. Develop and present a nutrition education lesson based on current nutrition research.

NUTR 4235. Entering the Field of Dietetics
1 Credit (1)
Students will develop professional materials that will be used in their future careers including a personal statement, 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. Restricted to: HNDS majors. Students must be a Senior to enroll.
Prerequisite/Corequisite: NUTR 4210.

Learning Outcomes

1. Students will develop professional materials that will be used in their future careers including a personal statement, 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

NUTR 4240. Medical Nutrition Therapy II
3 Credits (3)
Continuation of NUTR 4230.
Prerequisite: NUTR 4230.
Corequisite: NUTR 4240L.
Learning Outcomes

1. Select appropriate medical nutrition therapy interventions for various disease processes.
2. Master nutrition assessment of patients/clients utilizing the Nutrition Care Process Model.
3. Interpret medical terminology in patient chart notes and medical history records.
4. Evaluate laws regulations concerning dietetics.

NUTR 4240L. Medical Nutrition Therapy II Laboratory
1 Credit (1P)
Supplements NUTR 4240. 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. Students will learn and apply advanced nutritional therapies and patient management strategies. Restricted to: HNDS majors.
Corequisite(s): HNDS 4240.
Learning Outcomes

1. Calculate nutrition support recommendations and document orders in the patient's medical chart.
2. Demonstrate safe use of nutritional support equipment.
3. Master use of the Nutrition Care Process in case-based and simulated patient scenarios to conduct nutrition assessments and implement evidence-based interventions.
4. Critically evaluate lab values and client anthropometric data.
5. Select therapeutic diets for the treatment of medical conditions and their symptoms.

NUTR 4565. Field Experience Community Nutrition
1-8 Credits (1-8)
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 up to 8 credits. Consent of Instructor required.
Prerequisite(s): Senior standing, NUTR 4210, consent of instructor.
Learning Outcomes

1. Apply dietetics knowledge to practice in various community settings.
2. Develop a field experience portfolio highlighting the development of community nutrition knowledge and skills.
3. Compare and contrast the responsibilities of Registered Dietitians in various community practice organizations.

NUTR 4991. Special Problems
1-4 Credits (1-4)
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. May be repeated up to 8 credits. Consent of Instructor required.
Prerequisite(s): Junior or Senior standing.
Learning Outcomes

1. Develop specialized knowledge and competencies in a selected nutrition and dietetics subject area.

NUTR 5110. Graduate Studies in Advanced Nutrition
3 Credits (3)
Covers biochemistry and physiology applied to nutrition. Students enrolled in the 5000-level class will be required to complete additional assignments beyond what is required for NUTR 4110. Crosslisted with: NUTR 4110.
Prerequisite(s)/Corequisite(s): NUTR 3110. Student must be classified as a Graduate student to enroll in this course, BIOL 2221, BCHE 341, and NUTR 2110, or consent of instructor.
Learning Outcomes

1. Describe the processes of digestion and absorption within the human body.
2. Compare and contrast the structure and function of key nutrients.
3. Describe the metabolism of key nutrients under various conditions.
4. Apply concepts of energy and nutrient metabolism to common medical conditions and other relevant situations such as exercise or fasting.

NUTR 5150. Orientation to Dietetic Internship
3 Credits (3)
Dietetic interns prepare for supervised practice rotations. Topics include professionalism, Code of Ethics, and dietetic internship portfolios. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: HNDS majors.
Prerequisite(s): Acceptance into Dietetic Internship.
Learning Outcomes

1. Assembly of dietetic intern portfolio that will be kept throughout dietetic internship.
2. Readiness to begin supervised practice rotations.
3. Understanding of steps and processes to successfully complete requirements of dietetic internship and Masters of Science in Family Consumer Sciences.
4. Upon completion of the course, students will be able to understand the importance of evidence-based information, research ethics, the Code of Ethics of the Profession of Dietetics, and the basic structure of an IRB proposal.

NUTR 5210. Graduate Study in Community Nutrition
3 Credits (3)
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. Students enrolled in the 5000-level class will be required to complete additional assignments beyond what is required for NUTR 4110. May be repeated up to 3 credits. Crosslisted with: NUTR 4210.
Prerequisite(s): Graduate student, NUTR 3110, NUTR 3710, NUTR 3750, or consent of the instructor.
Learning Outcomes

1. Summarize the components of current national and local community nutrition programs.
2. Explain how national or state-level policy influences a community nutrition issue.
3. Write a needs assessment for a community nutrition issue using reliable sources of community nutrition information and data, and relevant research.

4. Develop goals and objectives of a nutrition program that address a community nutrition issue.
5. Develop a culturally appropriate nutrition education lesson plan that addresses a specific nutrition program objective.

NUTR 5220. Graduate Studies in Food Service Organization and Management
3 Credits (3)
Personnel, financial and general management in institutional and commercial food service operations. Students enrolled in the5000-level class will be required to complete additional assignments beyond what is required for NUTR 4220. May be repeated up to 3 credits.
Prerequisite(s): Graduate Students; HRTM 2120, NUTR 3120, or consent of instructor.
Learning Outcomes
1. Evaluate food products and menu plans through the application of food service management theories and principles.
2. Describe the process of and ethical considerations surrounding purchasing, receiving, storing, and controlling inventory of a given food item.
3. Evaluate food system, food safety practices, and management practices of a specific food service establishment.
4. Apply management theories and principles to quality assurance and human resource case scenarios.
5. Evaluate a nutrition and food service budget and interpret financial data.

NUTR 5230. Graduate Studies in Medical Nutrition I
3 Credits (3)
Special diets and physiological basis for their use. Laws and regulations concerning the practice of dietetics. Additional assignments beyond NUTR 4230 required. May be repeated up to 3 credits. Crosslisted with: NUTR 4230.
Prerequisite(s): Graduate student, NUTR 3110, NUTR 4110, BIOL 2225 or BIOL 2221, or consent of instructor.
Learning Outcomes
1. Examine the role of medical nutritional therapy in disease processes.
2. Apply nutritional assessment techniques utilizing the Nutrition Care Process.
3. Compose nutrition care plans and utilize various styles of medical charting.
4. Describe the interdisciplinary nature of working with a health care team in the delivery of medical nutritional therapy.

NUTR 5233. Graduate Studies in Nutrition Counseling & Education
3 Credits (3)
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. Additional assignments beyond NUTR 4233 required. May be repeated up to 3 credits. Crosslisted with: HNDS 4233.
Prerequisite(s)/Corequisite(s): NUTR 5230. Students must be classified as a Graduate student to enroll in this course, NUTR 2110, NUTR 3110, FCSC 348.
Learning Outcomes
1. Evaluate nutrition counseling strategies and tools in promoting behavior change and self-management.
2. Apply behavior change theories and models to nutrition counseling sessions.
3. Develop nutrition care plans for nutrition counseling clients.
4. Analyze professionalism and ethics within nutrition counseling and education.
5. Develop and present a nutrition education lesson based on current nutrition research.

NUTR 5240. Graduate Studies in Medical Nutrition Therapy II
3 Credits (3)
Continuation of HNDS 546. May be repeated up to 3 credits. Crosslisted with: NUTR 4240.
Prerequisite(s): Graduate student, NUTR 5230 and NUTR 4230L or consent of instructor.
Learning Outcomes
1. Select appropriate medical nutrition therapy interventions for various disease processes.
2. Master nutrition assessment of patients/clients utilizing the Nutrition Care Process model.
3. Interpret medical terminology in patient chart notes and medical history records.
4. Evaluate laws regulations concerning dietetics.

NUTR 5610. Dietetic Intern Seminar
1 Credit (1)
Portfolio development for dietetic interns during supervised practice rotations. May be repeated up to 3 credits. Consent of Instructor required.
Prerequisite(s): Acceptance into Dietetic Internship.
Learning Outcomes
1. CRDN
2. 2: Apply evidence-based guidelines, systematic reviews and scientific literature.
3. CRDN
4. 3: Justify programs, products, services and care using appropriate evidence or data.
5. CRDN
6. 4: Evaluate emerging research for application in nutrition and dietetics practice.
7. CRDN
8. 6: Incorporate critical-thinking skills in overall practice.
9. CRDN
10. 1: Practice in compliance with current federal regulations and state statutes and rules, as applicable and in accordance with accreditation standards and the Scope of Nutrition and Dietetics Practice and Code of Ethics for the Profession of Nutrition and Dietetics.
11. CRDN
12. 2: Demonstrate professional writing skills in preparing professional communications.

NUTR 5620. 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 the guidance of faculty and community nutrition professionals. May be repeated up to 8 credits. Consent of Instructor required. Restricted to: HNDS majors.
Prerequisite(s): Acceptance into Dietetic Internship.

Learning Outcomes

1. CRDN
2. 1 Select indicators of program quality and/or customer service and measure achievement of objectives.
3. CRDN
4. 2 Apply evidence-based guidelines, systematic reviews and scientific literature.
5. CRDN
6. 4 Evaluate emerging research for application in nutrition and dietetics practice.
7. CRDN
8. 5 Conduct projects using appropriate research methods, ethical procedures and data analysis.
9. CRDN
10. 14 Demonstrate advocacy on local, state or national legislative and regulatory issues or policies impacting the nutrition and dietetics profession.
11. CRDN
12. 1 Perform the Nutrition Care Process and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings.
13. CRDN
14. 5 Develop nutrition education materials that are culturally and age appropriate and designed for the literacy level of the audience.
15. CES
16. Consult with organizations regarding food access for target populations.
17. CES
18. Evaluate the operation of Cooperative Extension Service nutrition programs in the areas of policies and procedures. 1
19. CES
20. Develop and deliver nutrition presentations to client/consumer audiences on various topics related to client/consumer needs. 1
21. CES
22. Ensure cultural relevancy and appropriateness of nutrition education. 1
23. CES
24. Assess educational needs and provide nutrition counseling based on individual needs, knowledge, medical needs, and socioeconomic status.

NUTR 5630. Community Nutrition for Dietetic Interns
3 Credits (3)

Advanced topics in community nutrition to include conducting community nutrition needs assessments, program planning and grant writing. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: HNDS majors.

Prerequisite(s): Acceptance into Dietetic Internship.

Learning Outcomes

1. CRDN
2. 1 Select indicators of program quality and/or customer service and measure achievement of objectives.
3. CRDN
4. 2 Apply evidence-based guidelines, systematic reviews and scientific literature.
5. CRDN
6. 4 Evaluate emerging research for application in nutrition and dietetics practice.
7. CRDN
8. 5 Conduct projects using appropriate research methods, ethical procedures and data analysis.
9. CRDN
10. 14 Demonstrate advocacy on local, state or national legislative and regulatory issues or policies impacting the nutrition and dietetics profession.
11. CRDN
12. 1 Perform the Nutrition Care Process and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings.
13. CRDN
14. 5 Develop nutrition education materials that are culturally and age appropriate and designed for the literacy level of the audience.
15. CES
16. Consult with organizations regarding food access for target populations.
17. CES
18. Ensure cultural relevancy and appropriateness of nutrition education.

NUTR 5640. DI SUP PRACT FS MGT
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 NUTR 5640. May be repeated up to 5 credits. Consent of Instructor required. Restricted to: HNDS majors.

Prerequisite(s): Acceptance into Dietetic Internship.

NUTR 5650. Foodservice Management for Dietetic Interns
3 Credits (3)

Advanced topics in foodservice systems management to include business planning and marketing. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: HNDS majors.

Prerequisite(s): Acceptance into Dietetic Internship.

Learning Outcomes

1. CRDN
2. 2: Demonstrate professional writing skills in preparing professional communications.
3. CRDN
4. 15: Practice and/or role play mentoring and precepting others.
5. CRDN
6. 4: Design, implement and evaluate presentations to target audiences.
7. CRDN
8. 3: Demonstrate active participation, teamwork and contributions in group setting.
9. CRDN
10. 7: Apply leadership skills to achieve desired outcomes.
11. CRDN
12. 8: Demonstrate negotiation skills.
13. CRDN
14. 4: Apply current informatics technology to develop, store, retrieve and disseminate information and data.
15. CRDN

16. 6: Analyze quality, financial and productivity data for use in planning.
17. CRDN
18. 7: Conduct feasibility studies for products, programs, or services with consideration of costs and benefits.1
19. CRDN
20. 8: Develop a plan to provide or develop a product, program, or service that includes a budget, staffing needs, equipment and supplies.

NUTR 5660. 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. Restricted to: HNDS majors.
Prerequisite(s): Acceptance into Dietetic Internship.
Learning Outcomes
1. CRDN
2. 1 Select indicators of program quality and/or customer service and measure achievement of objectives.
3. CRDN
4. 4 Function as a member of interprofessional teams.
5. CRDN
6. 11 Show cultural competence/sensitivity in interactions with clients, colleagues and staff.
7. CRDN
8. 1 Perform the Nutrition Care Process and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings.
9. CRDN
10. 2 Conduct nutrition focused physical exams.
11. CRDN
12. 3 Demonstrate effective communication skills for clinical and customer services in a variety of formats

NUTR 5670. Nutrition Care Process for Dietetic Interns
3 Credits (3)
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.
Prerequisite(s): Acceptance into Dietetic Internship.Restricted to: HNDS majors.
Learning Outcomes
1. CRDN
2. 2: Apply evidence-based guidelines, systematic reviews and scientific literature.
3. CRDN
4. 3: Justify programs, products, services and care using appropriate evidence or data.
5. CRDN
6. 4: Evaluate emerging research for application in nutrition and diet.
7. CRDN
8. 4 Evaluate emerging research for application in dietetics practice.
9. CRDN
10. 2 Demonstrate professional writing skills in preparing professional communication. Perform the nutrition care process and use standardized nutrition language for individuals, groups, and populations of differing ages and health status, in a variety of settings.
11. CRND
12. 2 Conduct nutrition focused physical exams.

NUTR 5680. Review Course for National RD Exam
3 Credits (3)
Completion of dietetic internship portfolio and preparation for the national registration examination for dietitians. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: exclude HNDS majors.
Prerequisite(s): Acceptance into Dietetic Internship.
Learning Outcomes
1. Demonstrate readiness to take the National Registration Examination for Dietitians.
2. Completion of all requirements of the NMSU Dietetic Internship.
3. Completion of all requirements to receive a Master of Science in Family Consumer Sciences from New Mexico State University

NUTR 5991. Special Research Programs
1-4 Credits (1-4)
Individual investigations either analytical or experimental. Maximum of 4 credits per semester and no more than 6 credits toward a degree. May be repeated up to 6 credits.
Prerequisite(s): Graduate Student.
Learning Outcomes
1. Develop analytical or experimental research skills in the areas of human nutrition and dietetics.

NUTR 5996. Special Topics
1-4 Credits (1-4)
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. May be repeated up to 9 credits. Consent of Instructor required.
Prerequisite(s): Graduate student.
Learning Outcomes
1. Evaluate issues surrounding advanced nutrition and dietetics topics.

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