

Choose two of the following courses:

ANSC 370, Anatomy and Physiology of Farm Animals; BIOL 312, Plant Taxonomy; BIOL 330, Comparative Anatomy and Embryology; BIOL 354, Physiology of Humans; BIOL 377, Cell Biology; EPWS 314, Plant Physiology; EPWS 434, Insect Taxonomy; EPWS 472, Mycology.....6-8

#### OPTION: Environmental Biology

The Environmental Biology option prepares you for professional positions in environmental impact, regulation, compliance, and improvement.

AGHE 380G, Ecosystem Earth.....3  
 CH E 330, CH E 430, Environmental Seminars I, II.....2  
 CHEM 211, Organic Chemistry.....3  
 EPWS 314, Plant Physiology.....3  
 EPWS 390, Internship.....2-3  
 EPWS 451, Special Topics, Environmental Biology.....3  
 MATH 115, Intermediate Algebra.....3  
 MATH 142G, Calculus for Biological and Management Sciences I\*.....3  
 PHYS 211, 211L, General Physics I.....4  
 SOIL 257, Meteorology.....3  
 TOX 361, Basic Toxicology.....3

#### Electives may be chosen from the areas of:

- Basic Science—biology, botany, zoology
- Environment—meteorology, pollution, agricultural practices, biodiversity
- Toxicology—pesticides, worker safety, food safety
- Communication skills
- Math, statistics, modeling

#### OPTION: Entomology

The Entomology option prepares you for graduate degrees in entomology. Emphasis is placed on a broad background in field and laboratory aspects of insect biology and management.

AGRO 471, Plant Mineral Nutrition.....3  
 CHEM 313, 314, 315, Organic Chemistry I, II, and Lab.....8  
 BCHE 341, Survey of Biochemistry.....3  
 EPWS 314, Plant Physiology.....3  
 EPWS 434, Insect Taxonomy, or EPWS 451, Special Topics or Immature Insects.....3  
 EPWS 462, Parasitology.....3  
 EPWS 481, Nematology.....3  
 EPWS 491, Insect Physiology.....3  
 EPWS 492, Diagnosing Plant Disorders.....3  
 MATH 115, Intermediate Algebra or above.....3  
 MATH 142G, Calculus for Biological and Management Sciences I\*.....3  
 PHYS 110G, Introduction to Physics or above.....4

#### OPTION: Pest Management

The Pest Management option prepares you for careers such as agricultural consulting, chemical sales, insect, weed and disease management, research technicians, inspectors, and extension agents. You can also go on to graduate programs in many applied biology/pest management programs.

AGRO 471, Plant Mineral Nutrition.....3  
 CHEM 211, Organic Chemistry.....4  
 EPWS 314, Plant Physiology.....3  
 EPWS 434, Insect Taxonomy, or EPWS 451, Special Topics or Immature Insects.....3  
 EPWS 452, Pesticide Toxicology.....3  
 EPWS 455, Advanced Insect Pest Management, or EPWS 456, Biological Control.....3  
 EPWS 481, Plant Nematology, or EPWS 462, Parasitology.....3  
 EPWS 492, Diagnosing Plant Disorders.....3  
 MATH 115, Intermediate Algebra or above.....3  
 MATH 142G, Calculus for Biological and Management Sciences I\*.....3  
 PHYS 110G, Introduction to Physics or above.....4  
 SOIL 312, Soil Management and Fertility.....4

#### MINORS

Courses marked with † are required for the minor.

#### MINOR: Pest Management (18 credits)

EPWS 100, Introduction to Pest Management.....3  
 EPWS 100L, Introduction to Pest Management Lab.....1  
 †EPWS 303, Economic Entomology.....4  
 †EPWS 310, Plant Pathology.....4  
 †EPWS 311, Weed Science.....4  
 EPWS 434, Insect Taxonomy.....3  
 Upper-division EPWS course(s).....3-6

#### MINOR: Entomology (18 credits)

EPWS 100, Introduction to Pest Management.....3  
 EPWS 100L, Introduction to Pest Management Lab.....1  
 †EPWS 303, Economic Entomology.....4  
 EPWS 434, Insect Taxonomy.....3  
 EPWS 451, Special Topics.....3-9  
 EPWS 455, Advanced Insect Pest Management.....3  
 EPWS 456, Biological Control.....3  
 EPWS 462, Parasitology.....3  
 EPWS 491, Insect Physiology.....3

#### MINOR: Plant Pathology (18 credits)

BIOL 311, General Microbiology.....3  
 BIOL 311L, General Microbiology Lab.....1  
 EPWS 100, Introduction to Pest Management.....3  
 EPWS 100L, Introduction to Pest Management Lab.....1  
 †EPWS 310, Plant Pathology.....4  
 EPWS 314, Plant Physiology.....3  
 EPWS 449, Special Problems in Plant Pathology.....1-3  
 †EPWS 472, Mycology.....3  
 †EPWS 481, Plant Nematology.....3  
 EPWS 492, Diagnosing Plant Disorders.....3

#### MINOR: Weed Science (18 credits)

BIOL 312, Plant Taxonomy.....4  
 BIOL 470, Plant Community Ecology.....3  
 EPWS 100, Introduction to Pest Management.....3  
 EPWS 100L, Introduction to Pest Management Lab.....1  
 †EPWS 311, Weed Science.....4  
 †EPWS 314, Plant Physiology.....3  
 †EPWS 449, Special Problems in Weed Science.....1-3  
 EPWS 452, Applied Pesticide Toxicology.....3

## FAMILY and CONSUMER SCIENCES

**Professor Ann Vail, department head**

**Professors** Bock, Cummings, Del Campo, McKee, Vail; **Associate Professors** Devall, Eastman, Smitley; **Assistant Professors** Krishnan, Montanez

(505) 646-3936

**DEGREE: Bachelor of Science in Family and Consumer Sciences**

**MAJOR: Clothing, Textiles, and Fashion Merchandising**

**MAJOR: Family and Child Science**

**OPTION: Family Science**

**OPTION: Child Science**

**MAJOR: Family and Consumer Sciences Education**

**MAJOR: Human Nutrition and Food Science**

**OPTION: Dietetics**

**OPTION: Food Science and Technology**

**OPTION: Community Nutrition**

**OPTION: Nutrition and Fitness**

**OPTION: Prehealth with Emphasis in Nutrition**

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.

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

The following prefixes are used for courses: CTFM—Clothing, Textiles, and Fashion Merchandising; FCS—Family and Child Science; FCSE—Family and Consumer Sciences Education; FRMG—Family Resource Management; HNFS—Human Nutrition and Food Science.

### MAJOR: Clothing, Textiles, and Fashion Merchandising

This major prepares you for careers in the fashion industry. Courses are provided for you to study cultural, sociological, and psychological aspects of dress, business, textiles, fashion merchandising, and apparel production. You may also minor in related disciplines such as marketing, retail management, accounting, and other fields. You must have a GPA of 2.5 or better before enrolling in CTFM 402, Field Experience; FCSE 348, Teaching in Informal Family and Consumer Sciences Settings; and FCSC 400, Research Methods in Family and Consumer Sciences.

#### General Education Requirements

A list of specific general education requirements is available in the department. Please check with your adviser.

#### Departmental Requirements

CTFM 178, Fundamentals of Fashion .....	3
CTFM 255, Applied Clothing Design.....	3
CTFM 270, Fashion Illustration.....	3
CTFM 273, Concepts in Apparel Construction.....	3
CTFM 366, Historic Fashion .....	3
CTFM 371, Textile Science.....	3
CTFM 372, Fashion Merchandising.....	3
CTFM 402, Field Experience .....	3-6
CTFM 474, Fashion Promotion .....	3
CTFM 475, Fashion Buying.....	3
Two from the following: FCS 300+; FCSE 348, Teaching in Informal Family and Consumer Sciences Settings; FRMG 330, Personal and Family Finance; FRMG 333, Consumer Practices and Problems.....	6

#### Nondepartmental Requirements

ACCT 251, Management Accounting, or ACCT 252, Financial Accounting .....	3
ART 110G, Visual Concepts .....	3
CHEM 110G, Principles and Applications of Chemistry .....	4
COMM 265G, Principles of Human Communication; AXED 201G, Effective Leadership and Communication in Agricultural Organizations; or COMM 253G, Public Speaking .....	3
C S 110G, Computer Literacy, or AG E 250G, Life with Microcomputers .....	3
ECON 252G, Principles of Microeconomics.....	3
ENGL 111G, Rhetoric and Composition.....	4
ENGL 203G, Business and Professional Communication; ENGL 211G, Writing in the Humanities; ENGL 218G, Technical and Scientific Communication; ENGL 311G, Advanced Composition; or ENGL 318G, Advanced Technical and Professional Communication.....	3
E ST 311G, Statistical Applications, or STAT 251, Statistics for Business and the Behavioral Sciences.....	3
MATH 115, Intermediate Algebra .....	3
MATH 210G, Math Appreciation .....	3
MGT 309, Human Behavior in Organizations, or MGT 315G, Human Relations in Organizations.....	3
MKTG 303, Principles of Marketing .....	3
MKTG 313, Retail Management, or MKTG 324, Product and Price Management .....	3
PSY 201G, Introduction to Psychology.....	3
SOC 101G, Introductory Sociology.....	3
Historical Perspectives.....	3
Viewing a Wider World .....	6

#### Electives

Choose in consultation with CTFM adviser to round out curriculum of 128 credits. At least 54 credits must be courses labeled 300 or above. Choose from the following:

B A 301, Career Planning in Business.....	1
CTFM 384, Clothing for Special Needs .....	3
CTFM 470, Fashion Trend Analysis.....	3
CTFM 476, Apparel Design by Draping .....	3

CTFM 489, Fashion Markets.....	2-8
HON 323G, Cultural Perspectives on Dress.....	3
MGT 332, Human Resources Management.....	3
MGT 453, Leadership and Motivation .....	3
MKTG 317, International Marketing.....	3

(Check prerequisites before enrolling in courses.)

### MAJOR: Family and Child Science

This major stresses the interrelationship of individuals throughout the life span and the impact of social and economic factors on the family system. Graduates are prepared for professional work with social and community agencies and other activities serving families and consumers. You must work closely with an adviser. You must achieve a grade of C or higher in your required core and option courses, and must retake required courses with a grade lower than C. You must have a GPA of 2.5 or higher before enrolling in FCS 424, Field Experience; FCSC 400, Research Methods in Family and Consumer Sciences; and FCSE 348, Teaching in Informal Family and Consumer Sciences Settings.

#### General Education Requirements

A list of specific general education requirements is available in the department. Please check with your adviser.

#### Core Classes

FCS 181, Interpersonal Skills in Intimate Relationships .....	3
FCS 380, Family Dynamics .....	3
FCS 381, Middle Childhood Development in the Family .....	3
FCS 383, Parenting and Child Guidance .....	3
FCS 424, Field Experience .....	8
FCS 446, Adolescent Development and the Family.....	3
FCS 447, Childhood in the Family.....	3
FCS 448, The Aging Family.....	3
FCS 449G, Family Ethnicities and Subcultures.....	3
FCSC 400, Research Methods in Family and Consumer Sciences.....	3
FRMG 330, Personal and Family Finance.....	3
FRMG 333, Consumer Practices and Problems .....	3
HNFS 163, Nutrition for Health .....	3
FCSE 345, Management Concepts in FCSC Teaching, or FCSE 348, Teaching in Informal Settings.....	3

#### OPTION: Family Science

Select 4 courses, 12 credit hours.

C EP 300, Human Relations Training .....	3
FCS 462, Family Communication.....	3
HL S 468, Coping with Loss and Grief: A Cross-Cultural Perspective .....	3
HL S 487, Consumer Health.....	3
PSY 303, Community Psychology.....	3
PSY 317, Social Psychology .....	3
SOC 351, Sociological Theory .....	3
SOC 359, Sociology of the Family.....	3
SOC 374G, Comparative Family Systems .....	3
SOC 471, Advanced Race and Ethnic Relations.....	3
S WK 397, Special Topics.....	3
S WK 468, Interdisciplinary Social Practice: A Holistic Approach to Wellness .....	3

#### OPTION: Child Science

Select 4 courses, 12 credit hours.

C EP 320, Sex Roles in Education.....	3
ECED 360, Introduction to Early Childhood Education.....	3
ECED 451, Play in the Early Childhood Curriculum .....	3
FCS 462, Family Communication.....	3
HL S 355, Responding to Emergencies .....	3
PSY 321, Psychology of Personality.....	3
PSY 350, Developmental Psychology: Conception through Childhood .....	3
PSY 355, Developmental Research Methods .....	3
S WK 311, Human Behavior and the Social Environment I.....	3
S WK 497, Special Topics.....	3
Minor .....	18-24 (Optional)

**Nondepartmental Electives**

Choose in consultation with FCS adviser to round out curriculum of 128 credits. At least 54 credits must be courses labeled 300 or above. Choose from nondepartmental courses listed below.

COMM 377, Conflict Management.....	3
COMM 384, Interpersonal Communication .....	3
COMM 465, Nonverbal Communication .....	3
ECED 201, Learning Environment Design in Early Childhood .....	3
ECED 202, Communication and Creative Development in Early Childhood .....	3
ECED 203, Self Concept Development in Early Childhood .....	3
GERO 451, Aging and Public Policy.....	3
HL S 300, Drugs and Behavior.....	3
HL S 320, Human Stress Management.....	3
HL S 487, Consumer Health.....	3
PHIL 223G, Ethics .....	3
P E Activity Classes.....	1
PSY 302, Abnormal Psychology.....	3
PSY 324, Sexual Behavior.....	3
PSY 330, Psychology and the Law.....	3
S VKK 362, Social Work with African-American Families .....	3
S VKK 390, Family and Child Welfare Issues .....	3
SOC 273, Sex and Gender.....	3
SOC 372, Sociology of Health and Medicine.....	3
SOC 373, Aging and Society.....	3
SOC 473, Comparative Family Systems .....	3
SOC 485, Sociology of Law.....	3

*(Check prerequisites before enrolling in above courses.)*

**MAJOR: Family and Consumer Sciences Education**

This major prepares you for secondary school teaching as well as teaching in other educational settings such as the Cooperative Extension Service. Two options are available. The Teaching Option meets licensure requirements for New Mexico. The Extension Option prepares you to teach in the Cooperative Extension Service or other community agencies. In the spring semester of the senior year, principles of teaching are applied during student teaching in a selected school or a County Extension office. Requirements for admission to the Family and Consumer Sciences Education program are (1) an overall grade-point average of not less than 2.5 and a grade-point average of 2.5 or above in family and consumer sciences courses, (2) a C or better in all departmental courses and (3) recommendation of adviser. You must have a GPA of 2.5 or higher before enrolling in FCSC 400, Research Methods in Family and Consumer Sciences; FCSE 348, Teaching in Informal Family and Consumer Sciences Settings; FCSE 408, Field Experience in Extension; and FCSE 448, Supervised Teaching in Family and Consumer Sciences.

**General Education Requirements**

A list of specific general education requirements is available in the department. Please check with your adviser.

**Departmental Requirements**

CTFM 178, Fundamentals of Fashion, or CTFM 255, Principles of Clothing Selection .....	3
CTFM 273, Concepts in Apparel Construction.....	3
CTFM 371, Textile Science .....	3
FCS 181, Interpersonal Skills in Intimate Relationships.....	3
FCS 380, Family Dynamics.....	3
FCS 383, Parenting and Child Guidance .....	3
FCS 447, Infancy and Early Childhood in the Family .....	3
FCSE 245, Overview of Family and Consumer Sciences Teaching.....	3
FCSE 345, Management Concepts in Family and Consumer Sciences Teaching .....	3
FCSE 445, Vocational Programs for Youth and Adults.....	3
FCSE 446, Teaching Methods I .....	3
FCSE 447, Teaching Methods II.....	3
FRMG 330, Personal and Family Finance .....	3
FRMG 331, Management of Family Life and Resources .....	3
FRMG 333, Consumer Practices and Problems .....	3
FRMG 335, Housing and Interior Design .....	3
HNFS 163, Nutrition for Health, or HNFS 251, Human Nutrition.....	3
HNFS 263, Food Science I.....	3

HNFS food science elective (see adviser for selections).....	3
HNFS nutrition elective (see adviser for selections).....	3

**Nondepartmental Requirements**

BIOL 101G, Human Biology, or BIOL 111G, Natural History of Life.....	3
HRTM 201, The Tourism System and Travel Services, or HRTM 221, Introduction to Hospitality Management .....	3
SPED 350, Survey of Programs for Exceptional Learners .....	3

**Specific Teaching Option Requirements**

FCSE 448, Supervised Teaching in Family and Consumer Sciences.....	9
RDG 414, Content Area Literacy.....	3
Two electives from HIST, ECON, SOC and GOVT (One elective might meet Viewing a Wider World requirements) .....	6

**Specific Extension Option Requirements**

FCSE 408, Field Experience in Extension .....	9
Electives (AXED recommended).....	10

Upper-division hours must total 54. A second teaching field can also be arranged.

**MAJOR: Human Nutrition and Food Science****OPTION: Dietetics**

This option prepares you to be a dietitian in a variety of practice settings. A verification statement is issued upon completion of the didactic program. To get a verification statement, you must do the following (1) You must attain a C or higher (on campus or transfer) in the classes with CHEM, BCHE, BIOL, SP M & HNFS prefixes; (2) You will need to take a challenge exam related to each course if you desire to transfer in courses comparable to HNFS 446, HNFS 448, and HNFS 449. You must attain a C or higher on each exam before transfer credits will be allowed; (3) You must take at least 30 credits at New Mexico State University with 20 upper division (300 level or above) and 10 in HNFS (300 level or above). You must have a GPA of 2.5 or better before enrolling in FCSC 400, Research Methods in FCSC; FCSE 348, Teaching in Informal Family and Consumer Sciences Settings; or HNFS 401/407, Field Experience.

Following graduation, an experience in a hospital or institution approved by the Commission on Dietetic Education of the American Dietetic Association is required. Upon successful completion of the experience, you are eligible to take the registration exam required by The Commission on Dietetic Registration of the American Dietetic Association to be a Registered Dietitian. This option is part of a Didactic Program in Dietetics approved by The American Dietetic Association, 216 W. Jackson Blvd., Suite 800, Chicago, IL 60606-6995, (800) 877-1600. You must work closely with advisers to assure proper scheduling of necessary courses.

**General Education Requirements**

General education requirements are incorporated into the following list. Please check with your adviser.

**Departmental Requirements**

FCS 181, Interpersonal Skills in Intimate Relationships.....	3
FCSC 400, Research Methods in FCSC; AXED 456, Introduction to Research Methods; or HL S 451, Biometrics and Health Research .....	3
FCSE 348, Teaching in Informal Settings .....	3
HNFS 251, Human Nutrition .....	3
HNFS 263, Food Science I .....	3
HNFS 350, Nutrition throughout the Life Cycle .....	3
HNFS 363, Quantity Food Production and Service .....	4
HNFS 325, Food Analysis; HNFS 331, Food Preservation; HNFS 421, Food Chemistry; or HNFS 426, Dairy Products Manufacturing .....	3
HNFS 401/407, Field Experience-Hospital Dietetics/Community (4 total) (minimum of 1 credit in 401 and 1 credit in 407).....	4
HNFS 403, Community Nutrition.....	3
HNFS 430, Food Service Organization and Management .....	3
HNFS 446, Diet Therapy I.....	3
HNFS 447, Experimental Foods .....	3
HNFS 448, Advanced Nutrition.....	4
HNFS 449, Diet Therapy II.....	3
HNFS upper-division elective.....	3

**Nondepartmental Requirements**

AGE 250G, Life with Microcomputers*; BCS 110G, Introduction to Computerized Information Systems; or C S 110, Computer Literacy.....	3
ANTH 357G, Medical Anthropology; or ANTH 431, Nutritional Anthropology .....	3

BIOL 111/111L; or BIOL 211/211L; or BIOL 190 and 111L; or 211L, Biology and Laboratory.....	4
BIOL 253, Human Anatomy*; or BIOL/SP M 271 and 271L, Anatomy I.....	3-5
BIOL 254, Human Physiology.....	3
BCHE 341, Survey of Biochemistry.....	3
BCHE 342, Introductory Biochemistry Laboratory.....	1
CHEM 111, General Chemistry I.....	4
CHEM 112, General Chemistry II.....	4
CHEM 211, Organic Chemistry; or CHEM 313, Organic Chemistry I; and CHEM 314, Organic Chemistry II; and CHEM 315, Organic Chemistry Lab.....	4
COMM 253G, Public Speaking; or COMM 265G, Principles of Human Communication; or AXED 201G, Effective Leadership and Communication in Agricultural Organizations.....	3
ENGL 111G, Rhetoric and Composition.....	4
ENGL 203G, Business and Professional Communication; or ENGL 218G, Technical and Scientific Communication; or ENGL 318G, Advanced Technical and Professional Communication*.....	3
E ST 311G, Statistical Applications*, or STAT 251, Statistics for Business and Behavioral Sciences.....	3
GOVT 100G, American National Government*; or GOVT 110G, Introduction to Political Science; or GOVT 150G, American Political Issues.....	3
Historical Perspectives general education requirement.....	3
HNFS 320, Food Microbiology; or BIOL 219, Public Health Microbiology; and BIOL 311L, General Microbiology Lab; or BIOL 311/311L, General Microbiology.....	3-5
HRTM 202, Hospitality Financial Systems; or ACCT 251, Management Accounting; or ACCT 252, Financial Accounting.....	3
Literature and Fine Arts general education requirement.....	3
MATH 115, Intermediate Algebra.....	3
MATH 142G, Calculus for the Biological and Management Sciences I.....	3
MGT 332, Human Resource Management*; or MGT 309, Human Behavior in Organizations; or HRTM 303, Hospitality Human Resource Management.....	3
OEHO 120, Medical Terminology.....	3
PSY 201G, Introduction to Psychology.....	3
Viewing a Wider World:	
C EP 451G, Introduction to Counseling.....	3
GEOG 315G, World Agriculture and Food Problems.....	3
Electives, departmental and nondepartmental, sufficient to bring total credits to 128, including 54 upper-division.	
*Preferred	

#### OPTION: Food Science and Technology

You will follow a basic course plan providing a comprehensive background in the properties and preservation of foods. Graduates may be employed in areas such as food systems management, quality assurance, food safety, product development, or food processing. Job opportunities are available in private industry, educational institutions, and government. You must have a GPA of 2.5 or better before enrolling in FCSC 400, Research Methods in FCSC; FCSE 348, Teaching in Informal Family and Consumer Sciences Settings; or HNFS 427/428, Food Industry Problems I/II.

#### General Education Requirements

A list of specific general education requirements is available in the department. Please check with your adviser.

#### Departmental Requirements

HNFS 163, Nutrition for Health, or HNFS 251, Human Nutrition.....	3
HNFS 263, Food Science I.....	3
HNFS 320, Food Microbiology.....	3
HNFS 325, Food Analysis.....	3
HNFS 331, Food Preservation.....	3
HNFS 421, Food Chemistry.....	3
HNFS 426, Dairy Products Manufacturing.....	3
HNFS 427/428, Food Industry Problems, or FCSC 400, Research Methods in Family and Consumer Sciences.....	3-6
HNFS 447, Experimental Foods.....	3
HNFS elective (300 or above).....	3
Any course (3 or more credits) from CTFM, FCS, FCSC, FCSE, or FRMG	

#### Nondepartmental Requirements

ANSC 100, Introductory Animal Science.....	3
ANSC 262, Introduction to Meat Science.....	3
BCHE 341, Survey of Biochemistry.....	3
BCHE 342, Introductory Biochemistry Laboratory.....	1
BIOL 311, General Microbiology.....	3
BIOL 311L, General Microbiology Laboratory.....	2
CHEM 111, General Chemistry I.....	4
CHEM 112, General Chemistry II.....	4
CHEM 211, Organic Chemistry.....	4
HORT 100G, Introductory Plant Science.....	4
PHYS 211, General Physics I.....	3
PHYS 211L, General Physics I Lab.....	1

#### Potential Electives

Electives, departmental and nondepartmental, sufficient to bring total credits to 128, including 54 upper-division.

AG E 305, Marketing and Pricing Agricultural Products.....	3
ANSC 306, Processed Meats.....	3
ANSC 363, Meat Technology.....	3
BIOL 451, Physiology of Microorganisms.....	3
BIOL 473, Ecology of Microorganisms.....	3
BIOL 477, Applied and Environmental Microbiology.....	4
CH E 395G, Brewing Science and Society.....	3
CHEM 371, Analytical Chemistry.....	3
CHEM 422, Environmental Chemistry.....	3
GEOG 315G, World Agriculture and Food Problems.....	3
HORT 420, Postharvest Biology and Technology.....	4

Students are encouraged to complete a minor in a related area such as chemistry, microbiology and business. Consult with an adviser for requirements.

#### OPTION: Community Nutrition

This option prepares you to function in a nutrition capacity in a community or public health setting such as the Department of Health (Women, Infant and Child Nutrition Program; Adult Health; Children's Medical Services), School Food Service, and the Area Agency on Aging. You must attain a C or higher (on campus or transfer) in all CHEM, BIOL, HL S, and HNFS course work. You must take at least 30 credits at NMSU and complete 54 credits at the upper-division (300+) level. A minimum of 128 credits is required for the degree. You must have a GPA of 2.5 or better before enrolling in FCSC 400, Research Methods in FCSC; FCSE 348, Teaching in Informal Family and Consumer Sciences Settings; or HNFS 407, Field Experience.

You should be aware that in some states there are licensure laws related to the practice of therapeutic nutrition. Such licensure often requires you to have a minimum of the didactic requirements that are noted by \* below. Didactic requirements that are NOT included in this program of study are detailed at the end of the degree requirements. In addition to meeting the didactic requirements, you must also complete a supervised practice program sanctioned by the American Dietetic Association (ADA) and take the national examination administered by the ADA. To broaden career possibilities, you are highly recommended to complete all requirements to become a registered dietitian.

#### Departmental Requirements

FCS 181, Interpersonal Skills in Intimate Relationships*.....	3
FCSE 348, Teaching in Informal Family and Consumer Sciences Settings, or FCSE 345, Management Concepts in Family and Consumer Sciences Teaching*.....	3
FCSC 400, Research Methods in Family and Consumer Sciences*.....	3
HNFS 251, Human Nutrition*.....	3
HNFS 263, Food Science I*.....	3
HNFS 320, Food Microbiology*.....	3
HNFS 350, Nutrition throughout the Life Cycle*.....	3
HNFS 403, Community Nutrition*.....	3
HNFS 407, Community Nutrition Field Experience*.....	4
HNFS nutrition electives (choose 12 hours from the following): HNFS 404, Maternal, Infant and Child Nutrition; HNFS 406, Geriatric Nutrition; HNFS 410, Sports Nutrition; HNFS 416, Nutrition and Culture; HNFS 492, Special Problems*.....	12

HNFS food science electives (choose 3 hours from the following): HNFS 325, Food Analysis; HNFS 331, Food Preservation; HNFS 447, Experimental Foods\* ..... 3

#### Nondepartmental Requirements

AG E 250G, Life with Microcomputers, or C S 110G, Computer Literacy ..... 3  
 ANTH 431, Nutritional Anthropology, or ANTH 357G, Medical Anthropology... 3  
 BIOL 111G/111L, Natural History of Life; or BIOL 211G/211L; Cellular and Organismal Biology; or BIOL 190/111L, Principles of Biology\* ..... 3  
 CHEM 110G, Principles and Applications of Chemistry; or CHEM 111/111L, General Chemistry I; and CHEM 112/112L, General Chemistry II and Lab ..... 4 or 8  
 COMM 265G, Principles of Communication; or COMM 253G, Public Speaking; or AXED 201G, Effective Leadership; and Communication in Agricultural Organizations\* ..... 3  
 ENGL 111G, Rhetoric and Composition\* ..... 4  
 ENGL 203G, Business and Professional Communication; or ENGL 218G, Technical and Scientific Communication; or ENGL 318G, Advanced Technical and Professional Communication\* ..... 3  
 E ST 311G, Statistical Applications\*, or STAT 251, Statistics for Business; and Behavioral Sciences ..... 3  
 GOVT 100G, American National Government; or GOVT 110G, Introduction to Political Science; or GOVT 150G, American Political Issues ..... 3  
 HL S 100, Introduction to Health Science ..... 1  
 HL S 150, Personal Health and Wellness ..... 3  
 HL S 275, Foundations of Health Education ..... 3  
 HL S 286G, Wellness and Lifestyle Choices ..... 3  
 HL S 395, Foundations of Public Health ..... 3  
 HL S 476, Health Risk Reduction ..... 3  
 HL S electives (Choose 15 hours from the following): HL S 461, Health Communications with Hispanic Clients; HL S 462, Hispanic Health Issues; HL S 464G, Cross-Cultural Aspects of Health; HL S 465, International Health Problems; HL S 467, Rural Health Issues; HL S 469, U.S.-Mexico Border Health Issues; HL S 487, Consumer Health; HL S 492, Health Care of the Aged; HL S 493, Adulthood and Aging; HL S 494, Aging in a Multicultural Society ..... 15  
 MATH 115, Intermediate Algebra ..... 3  
 MATH 142G, Calculus for the Biological and Management Sciences I ..... 3  
 OEHO 120, Medical Terminology\* ..... 3  
 PHIL 223G, Ethics ..... 3  
 PSY 201G, Introduction to Psychology ..... 3  
 General Electives ..... 4

#### General Education Requirements

History General Education requirement ..... 3  
 Literature/Fine Arts General Education requirement ..... 3  
 Viewing a Wider World requirement:  
 C EP 451G, Introduction to Counseling\* ..... 3  
 GEOG 315G, World Agriculture and Food Problems ..... 3  
 Additional course work needed to complete the American Dietetic Association Didactic Program in Dietetics requirements:

#### Departmental Requirements

HNFS 363, Quantity Food Production and Service ..... 4  
 HNFS 401, Field Experience, Hospital Dietetics ..... 1  
 HNFS 430, Food Service Organization and Management ..... 3  
 HNFS 446, Diet Therapy I ..... 3  
 HNFS 447, Experimental Foods ..... 3  
 HNFS 448, Advanced Nutrition ..... 4  
 HNFS 449, Diet Therapy II ..... 3

#### Nondepartmental Requirements

BCHE 341, Survey of Biochemistry ..... 3  
 BCHE 342, Introductory Biochemistry Laboratory ..... 1  
 BIOL 253, Human Anatomy, or BIOL/SP M 271/271L, Anatomy I ..... 4  
 BIOL 254, Human Physiology ..... 3  
 CHEM 111/111L, General Chemistry I ..... 4  
 CHEM 112/112L, General Chemistry II ..... 4  
 CHEM 211, Organic Chemistry ..... 4  
 HRTM 202, Hospitality Financial Systems; or ACCT 251, Management Accounting; or ACCT 252, Financial Accounting ..... 3

MGT 309, Human Behavior in Organizations; or MGT 332, Human Resources Management; or HRTM 303, Hospitality Human Resources Management ..... 3

#### OPTION: Nutrition and Fitness

This option will give you a background in both nutrition and fitness that will prepare you to work in settings such as corporate and community wellness programs, gyms, and other areas related to nutrition and physical fitness. You must attain a C or higher (on campus or transfer) in all CHEM, BIOL, HL S, and HNFS course work. You must take at least 30 credits at NMSU and complete 54 credits at the upper division (300+) level. A minimum of 128 credits is required for the degree. You must have a GPA of 2.5 or better before enrolling in FCSC 400, Research Methods in FCSC, FCSE 348, Teaching in Informal Family and Consumer Sciences Settings, or HNFS 401/407, Field Experience.

You should be aware that in some states there are licensure laws related to the practice of therapeutic nutrition. Such licensure often requires you to meet didactic requirements. Didactic requirements that are NOT included in this program of study are detailed at the end of the degree requirements. In addition to meeting the didactic requirements, you must also complete a supervised practice program sanctioned by the American Dietetic Association (ADA) and take the national examination administered by the ADA. To broaden career possibilities, it is highly recommended you complete all requirements to become a registered dietitian.

#### Departmental Requirements

FCS 181, Interpersonal Skills in Intimate Relationships ..... 3  
 FCSE 348, Teaching in Informal Settings ..... 3  
 HNFS 251, Human Nutrition ..... 3  
 HNFS 350, Nutrition Throughout the Life Cycle ..... 3  
 HNFS 403, Community Nutrition ..... 3  
 HNFS 401/407, Field Experience - Hospital Dietetics/Community (4 total; minimum of 1 credit in 401 and 1 credit in 407) ..... 4  
 HNFS 410, Sports Nutrition ..... 3  
 HNFS 446, Diet Therapy I ..... 3  
 HNFS 448, Advanced Nutrition ..... 4  
 HNFS 449, Diet Therapy II ..... 3

#### Non-Departmental Requirements

AG E 250G\*, Life with Microcomputers, C S 110G, Computer Literacy, or BCS 110G, Introduction to Computerized Information Systems ..... 3  
 ANTH 431\*, Nutritional Anthropology, or ANTH 357G, Medical Anthropology ..... 3  
 BCHE 341, Survey of Biochemistry and BCHE 342, Intro to Biochemistry Lab ..... 4  
 BIOL 211G/L\* Cellular & Organismal Biology or BIOL 190 and BIOL 111L or BIOL 211L ..... 4  
 BIOL 254, Human Physiology ..... 3  
 CHEM 111, General Chemistry I and Lab ..... 4  
 CHEM 112, General Chemistry II and Lab ..... 4  
 CHEM 211, Organic Chemistry or CHEM 313 and CHEM 314 and CHEM 315 ..... 4 or 8  
 COMM 265G\*, Principles of Communication, or COMM 253G, Public Speaking, or AXED 201G, Effective Leadership and Communication in Agricultural Organizations\* ..... 3  
 E ST 311G\*, Statistical Applications, or STAT 251, Statistics for Business and Behavioral Sciences ..... 3  
 ENGL 111G or ENGL 111H, Rhetoric and Composition ..... 4  
 ENGL 218G or 318G\*, Technical & Scientific Communication ..... 3  
 GOVT 100G\*, American National Government, or GOVT 110G, Introduction to Political Science, or GOVT 150G, American Political Issues ..... 3  
 HL S 320, Human Stress Management ..... 3  
 MATH 115, Intermediate Algebra ..... 3  
 MATH 142G, Calculus for the Biological and Management Sciences I ..... 3  
 OEHO 120, Medical Terminology ..... 3  
 PE P 208, Fitness for Health & Sports ..... 3  
 PSY 201G, Introduction to Psychology ..... 3  
 SP M 250, Sport Safety ..... 2  
 SP M 271/L, Anatomy I ..... 4  
 SP M 305, Biomechanics ..... 3  
 SP M 308, Exercise Physiology ..... 3  
 SP M 309, Anatomical Kinesiology ..... 3

SP M 330, Exercise Prescription .....3  
 SP M 415, Therapeutic Modalities.....3  
 SP M 451, Advanced Exercise Physiology .....3  
 SP M 460, Principles of Strength & Conditioning.....3

**General Education Requirements**

History General Education requirement.....3  
 Literature/Fine Arts Requirement.....3

**Viewing a Wider World Requirements**

C EP 451G, Introduction to Counseling.....3  
 Additional Viewing a Wider World.....3

**ADA Registration Commission on Dietetic Education of the American Dietetic Association**

Additional course work required for application to a Supervised Practice program.

**Departmental Requirements**

FCSC 400, Research Methods in FCSC; AXED 456, Research Methods; or PEP 411, Tests & Measurements .....3  
 HNFS 263, Food Science I .....3  
 HNFS 320, Food Microbiology .....3  
 HNFS 363, Quantity Foods .....4  
 HNFS 430, Food Service Organization & Mgt.....3  
 HNFS 447, Experimental Foods .....3  
 HNFS Food Science Elective.....3

**Non-Departmental Requirements**

GEOG 315G, World Ag & Food Problems .....3  
 HRTM 202, Hospitality Financial Systems, or ACCT 251, Management Accounting, or ACCT 252, Financial Accounting .....3  
 MGT 332, Human Resources Management, or MGT 309, Human Behavior in Organizations, or HRTM 303, Hospitality Human Resources Mgt.....3

\* Preferred

**OPTION: Prehealth with Emphasis in Nutrition**

Students planning to attend medical or dental schools may enroll in any discipline. This option is designed to meet the requirements for entry into most medical or dental schools as well as schools associated with other health professions such as physical therapy and pharmacy. Most professional schools require chemistry (16 credits), biology (8-16 credits), calculus (3 credits) and physics (8 credits). These requirements have been incorporated into this option. In addition to the requirements needed for the delineated health professions, this option will also provide an extensive background in nutrition, which is integral to these professions. Because there is a growing interest in having multiskilled professionals, you may want to also complete the additional course work outlined at the bottom of this program of study so that you will have met the academic requirements for becoming a registered dietitian. You must have a GPA of 2.5 or better before enrolling in FCSC 400, Research Methods in FCSC; FCSE 348, Teaching in Informal Family and Consumer Sciences Settings; or HNFS 401/407, Field Experience.

Selection to professional schools is typically based on four separate but interrelated criteria: (1) evaluation of academic transcripts, (2) evaluation of scores on admissions tests, (3) letters of recommendation, and (4) personal interviews. The Health Professions Advisory Committee works with all prospective applicants to professional school to provide advice and information on the admissions process and to ensure that all prehealth students have the best possible opportunity of gaining admission to the school of their choice. You are expected to register with the committee no later than the first semester of your sophomore year. Check with an adviser for information.

**Departmental Requirements**

HNFS 163, Nutrition for Health, or HNFS 251, Human Nutrition .....3  
 HNFS 350, Nutrition Throughout the Life Cycle .....3  
 HNFS 403, Community Nutrition .....3  
 HNFS 401, Field Experience—Hospital Dietetics, and HNFS 407, Field Experience—Community (minimum 1 credit in HNFS 401 and 1 credit in HNFS 407) .....4  
 HNFS 446, Diet Therapy I .....3  
 HNFS 448, Advanced Nutrition.....4  
 HNFS 449, Diet Therapy II .....3

**Nondepartmental Requirements**

AG E 250G, Life with Microcomputers or C S 110G Computer Literacy..... 3  
 AXED 456, Research Methods, or FCSC 400, Research Methods in Family and Consumer Sciences, or HL S 451, Biometrics and Health Research ..... 3  
 BCHE 395, Biochemistry ..... 3  
 BIOL 211G/211L, Cellular and Organismal Biology .....3/1  
 BIOL 253 or BIOL/SP M 271/271L, Human Anatomy Lecture/Lab .....3-4  
 BIOL 254, Human Physiology ..... 3  
 BIOL 311, 311L, General Microbiology.....3/2  
 CHEM 111, General Chemistry I..... 4  
 CHEM 112, General Chemistry II..... 4  
 CHEM 313, Organic Chemistry I..... 3  
 CHEM 314, Organic Chemistry II..... 3  
 CHEM 315, Organic Chemistry Laboratory ..... 2  
 COMM 253G or 265G, Communications, or AXED 201G, Effective Leadership and Communication in Agricultural Organizations ..... 3  
 ENGL 111G, Rhetoric and Composition..... 4  
 ENGL 203G, Business and Professional Communication; or ENGL 218G, Technical and Scientific Communication; or ENGL 318G, Advanced Technical and Professional Communication ..... 3  
 E ST 311G, Statistical Application..... 3  
 GOVT 100G, American National Government; or GOVT 110G, Introduction to Political Science; or GOVT 150G, American Political Issues ..... 3  
 Historical Perspectives (general education)..... 3  
 Literature and Fine Arts (general education)..... 3  
 OEHO 120, Medical Terminology..... 3  
 PHYS 211, 211L, General Physics I..... 4  
 PHYS 212, 212L, General Physics II ..... 4  
 PSY 201G, Introduction to Psychology..... 3  
 Two Viewing a Wider World  
 C EP 451G, Introduction to Counseling ..... 3  
 ANTH 357G, Medical Anthropology ..... 3  
 Electives, departmental and nondepartmental, sufficient to bring total credits to at least 128, including 54 upper-division.

**Students Preparing for Medical or Dental School:**

MATH 115, Intermediate Algebra ..... 3  
 MATH 180, Trigonometry ..... 2  
 MATH 185, College Algebra..... 3  
 MATH 191, Calculus & Analytical Geometry I..... 3  
 Student Preparing for Most Other Prehealth Schools:  
 MATH 115, Intermediate Algebra ..... 3  
 MATH 142G, Calculus for Biological and Management Sciences..... 3

**To Meet Academic Requirements for Registered Dietitian**

The course work delineated above for prehealth with an emphasis in nutrition coupled with the course work outlined below provides the academic requirements for you to obtain registration as a dietitian. A verification statement is issued upon completion of the didactic program. To get a verification statement (1) you must attain a C or higher (on campus or transfer) in the following classes: All courses with CHEM, BCHE, and BIOL/SP M prefixes and all classes with HNFS prefix; (2) you will need to take a challenge exam related to each course if you desire to transfer in courses comparable to HNFS 448 and HNFS 449; you must attain a C or higher on each exam before transfer credits will be allowed; (3) you must take at least 30 credits at New Mexico State University with 20 as upper-division (300 level or above) credits and 10 credits in HNFS (300 level or above).

Following graduation, a supervised practice experience in a hospital or institution approved by the American Dietetic Association is required. Note: This experience CANNOT be met by attending professional health school. Upon successful completion of the experience, you are eligible to take the registration exam required by the American Dietetic Association to be a Registered Dietitian. The academic requirements delineated above and below meet ADA requirements of an ADA-approved Didactic Program in Dietetics. You must work closely with advisers to assure proper scheduling of necessary courses.

**Departmental Requirements**

FCS 181, Interpersonal Skills in Intimate Relationships ..... 3  
 FCSE 348, Teaching in Informal Settings ..... 3

HNFS 263, Food Science I.....	3
HNFS 363, Quantity Food Production & Service.....	4
HNFS 325, Food Analysis; HNFS 331, Food Preservation; HNFS 421, Food Chemistry; or HNFS 426, Dairy Products Manufacturing.....	3
HNFS 430, Food Service Organization & Management.....	3
HNFS 447, Experimental Foods.....	3
<b>Nondepartmental Requirements</b>	
HRTM 202, Hospitality Financial Systems; or ACCT 251, Management Accounting; or ACCT 252, Financial Accounting.....	3
MGT 332, Human Resources Management, or MGT 309, Human Behavior in Organizations, or HRTM 303, Hospitality Human Resource Management.....	3

## FISHERY and WILDLIFE SCIENCES

**Professor Donald F. Caccamise, department head**  
**Professors** Valdez; **Associate Professor** Andersen; Caldwell, Desmond; **Assistant Professors** Bender, Boeing, Cowley, Roemer (505) 646-7051; natres@nmsu.edu

**DEGREE: Bachelor of Science in Agriculture**  
**MAJOR: Wildlife Science**  
**OPTION: Wildlife Management Practice**  
**OPTION: Preparation for Graduate Studies**  
**OPTION: Natural Resource Management**

**DEGREE: Bachelor of Science in Conservation Ecology**  
**MAJOR: Conservation Ecology**

**MINORS: Conservation Ecology**  
**Wildlife Science**

**DEGREE: Bachelor of Science in Conservation Ecology**  
 New Mexico State University offers a new interdisciplinary, undergraduate program in Conservation Ecology. Program details and degree requirements are listed under "Cross-College Degrees" (pages 104-105).

**DEGREE: Bachelor of Science in Agriculture**  
 The department prepares you for careers in a variety of natural resource fields related to management of wild animal populations and the natural systems they share.

Within the wildlife science major you are offered three options. The first is Wildlife Management Practice. Course work in this option provides training in the basic sciences but concentrates on applied skills in wildlife and fisheries management. If you complete this option, you will be ready for entry-level positions with government agencies and private enterprises specializing in natural resource management. The option in Natural Resource Management is broad in scope while providing a strong background in the fundamental sciences. It includes sound training in the theory and practice of traditional management as well as a solid grounding in supporting disciplines like economics, geography, and geology. It is intended for students with broader interests than traditional wildlife science. The third option, Preparation for Graduate Studies in Wildlife Science, offers a broad foundation in basic sciences. It is intended for students wishing to pursue advanced degrees in wildlife science or related disciplines in the natural sciences. This option prepares you for careers in higher education, research, and administration.

If you wish to become a certified fishery biologist, you should include the following courses in your curriculum: WLSC 458, WLSC 465, WLSC 482, and WLSC 432. Requirements for becoming a certified wildlife biologist are met by all options.

To graduate with a major in Wildlife Science, an overall grade point average of 2.00 is required in courses taken in the major field and in all courses taken at NMSU.

The department offers a minor in Wildlife Science for students majoring in other disciplines. The minor includes a minimum of 19 credits, with 13 credits in required courses and 6 in wildlife electives.

**Core Requirements (total credits: 89-97)**

BIOL 111G and 111L, Natural History of Life and Laboratory.....	4
BIOL 301, Principles of Ecology.....	3
BIOL 305, Principles of Genetics.....	3
BIOL 312, Identification and Classification of Western Plants, ..... or RGSC 307, Rangeland Grasses, and RGSC 316, Rangeland Plants.....	3
BIOL 313, Structure and Function of Plants.....	3
BIOL 322, Zoology.....	3
CHEM 111, General Chemistry I.....	4
CHEM 112, General Chemistry II.....	4
COMM 265G, Principles of Human Communication; or COMM 253G, Public Speaking; or AXED 201G, Effective Leadership and Communication in Agricultural Organizations.....	3
C S: Any level computer science course 100 or above including, C S 110G, Computer Literacy, or AG E 250G, Life with Microcomputers.....	3
ECON 251G, Principles of Macroeconomics, or ECON 252G, Principles of Microeconomics.....	3
ENGL 111G, Rhetoric and Composition.....	4
ENGL 311G, Advanced Composition.....	3
ENGL 318G, Advanced Technical and Professional Communication.....	3
E ST 311G, Statistical Applications.....	3
MATH 115, Intermediate Algebra, and 142G, Calculus for Biological and Management Sciences; or MATH 191, Calculus and Analytical Geometry I, and MATH 192, Calculus and Analytical Geometry II.....	6
PHYS: Any physiology course from among the following: ANSC 370, BIOL 311, BIOL 314, BIOL 377, BIOL 381, BIOL 442, BIOL 474, WLSC 432	
WLSC 110, Introduction to Natural Resources Management.....	3
WLSC 230, Natural History of the Vertebrates.....	4
WLSC 255, Principles of Natural Resource Management.....	3
WLSC 355, Techniques of Natural Resource Management,..... or WLSC 356, Field Techniques of Natural Resource Management, ..... or RGSC 452, Rangeland Analysis.....	2
WLSC 402, Seminar in Natural Resource Management.....	2
WLSC 409, Population Ecology.....	3
WLSC 447, Wildlife Law Administration and Policy.....	3
WLSC 445, Systems Ecology in Wildlife Management.....	3
Historical Perspectives: one general education course.....	3
Human Thought and Behavior: one general education course.....	3
Literature or Fine Arts: one general education course.....	3
Viewing a Wider World: ECON 337G, Natural Resource Economics or ECON 384G, Water Resource Economics.....	3
Viewing a Wider World: The second course requirement satisfied by 9 credits in biology	

**OPTION: Wildlife Management Practice (total credits: 23-25)**

**General Option Requirements (8 credits)**

PHYS 110G, Great Ideas in Physics.....	4
SOIL 252 and 252L, Soils and Laboratory, or GEOL 111, Geology.....	4
Required Departmental Electives (any combination totaling 9 credits)	
WLSC 310, Managing Ecological Systems for Biodiversity.....	3
WLSC 360, Introduction to Wildlife Behavior.....	3
*WLSC 432, Environmental Biology of Fishes.....	4
WLSC 434, Aquatic Contaminants and Toxicology.....	4
WLSC 437, Wildlife Damage Control.....	3
WLSC 440, Fish and Wildlife Habitat Management.....	3
WLSC 448, Problems.....	1-3
WLSC 450, Special Topics.....	1-4
*WLSC 458 and 458L, Ecology of Inland Waters and Lab.....	4
*WLSC 465 Advanced Management of Aquatic Systems.....	3
WLSC 466, Advanced Management of Wildlife—Mammals.....	3
WLSC 488, Communicating Wildlife Resource Conservation in Society.....	3

**Requirements in Biodiversity (any two courses totaling 6-8 credits)**

BIOL 445, Herpetology.....	4
BIOL 465, Invertebrate Zoology.....	4
WLSC 430, Avian Field Ecology, or BIOL 447, Ornithology.....	4
WLSC 431, Forest and Range Mammals.....	3