NUTRITION AND DIETETICS

College of Health and Human Services
Department of Family and Consumer Sciences

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Career Possibilities

Clinical Dietitian • Private Practice Dietitian • Research Dietitian • School Foodservice Director • Food Products Sales Representative • Food Technologist • Food Service Supervisor • Restaurant Manager • Public Health Nutritionist • Food and Drug Inspector • Public Health and Wellness Educator • Community Nutrition Programs • Health Clubs • Private Consulting • Health and Welfare Agencies • Program Administration • Health Promotion. (Some of these, and other careers, require additional education or experience. For more information, see www. careers.csulb.edu.)

Undergraduate Degrees

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality, Foodservice and Hotel Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Dietetics and Food Administration

The Department of Family and Consumer Sciences offers students a Bachelor of Science degree in Dietetics and Food Administration with two option areas of study:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this *Catalog*.

Requirements for the major include a minimum of 128 units for Nutrition and Dietetics. In addition to general education requirements (48 units), a minimum of 40 units in Family and Consumer Sciences is required, 24 of which must be upper division. Students transferring from another college or university will receive transfer credit in required courses if the course is equivalent to the course at this University and it is accepted by the University.

Nutrition and Dietetics

Individuals choosing this option will concentrate their studies in the areas of nutritional science, medical nutrition therapy, community nutrition, food production and management of foodservice operations, chemistry, physiology, plus a variety of supporting course work in related disciplines. The Nutrition and Dietetics option with appropriate elective selection fulfills the Academy of Nutrition and Dietetics (AND) academic requirements for eligibility to apply for qualifying experiences required to become a Registered Dietitian.

Becoming a Registered Dietitian

Registered Dietitians (RDs) are considered food and nutrition experts. They have met the following criteria to earn the RD credential:

• Completion of a minimum of a bachelor's degree at a U.S. regionally accredited university or college and course work accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the credentialing agency of the Academic of Nutrition and Dietetics (AND).

• Completion of a supervised practice program accredited by ACEND and the AND.

• Passed a national examination administered by the Commission on Dietetic Registration (CDR).

In order to maintain registration, the RD must provide evidence of fulfilling continuing professional educational requirements to maintain registration. Some RDs hold additional certifications in the specialized areas of practice, such as pediatric or renal nutrition, nutrition support, and diabetes education. These certifications are awarded through CDR and/or other medical and nutrition organizations and are recognized within the profession, but are not required.

In addition to RD credentialing, many states have regulatory laws for dietitians and nutrition practitioners. Frequently these state requirements are met through the same education and training required to become an RD.

Option in Nutrition and Dietetics (128 units)

Take all of the following courses:

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. Credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering.)

CHEM 449 Nutritional Biochemistry Laboratory (3)
Prerequisites: CHEM 448 with a grade of "C" or better.

COMM 110 Interpersonal Communication (3)
Corequisites: Concurrent enrollment in COMM 110 Workshop.

ED P 373I Nonverbal Communication: Interaction of Mind and Body (3)
Prerequisites: GE Foundation, one or more Exploration course(s), and upper-division standing.

ENGL 100 Composition (3)
Prerequisites: A recorded total score of 151 or above on the English Placement test, credit in ENGL 1 (or its equivalent), or consent of the instructor.

MICR 200 General Microbiology (4)
Prerequisites: CHEM 111A or 140 with a grade of "C" or better and GE Foundation requirements.

PSY 100 General Psychology (3)
Prerequisites/Corequisites: GE A1 requirement.

SOC 100 Principles of Sociology (3)
Prerequisites/Corequisites: A GE Foundation course.

CAFF 321I Family and Consumer Resource Management (3)
Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

CDFS 312I Family and Personal Development (3)
Prerequisites: GE Foundation requirements; PSY 100 or SOC 100 or ANTH 120; upper division standing; or consent of instructor.

FCSE 299 Introduction to Family and Consumer Sciences (1)
Prerequisites: None.

FCSE 486 Instructional Strategies for Family & Consumer (3)
Prerequisites: Senior standing.

FCSE 499 Professionalism and Leadership in Family and Consumer Sciences Professionals (2)
Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course working Family and Consumer Sciences. Must be taken in one of the last two semester prior to graduation.

FSCI 332 Food Science (3)
Prerequisites: CHEM 327; HFHM 235; MICR 200 or equivalent.

HFHM 173 Applied Foodservice Sanitation (1)
Prerequisites: None.

HFHM 235 Principles of Food Preparation (3)
Prerequisites: None.

HFHM 275 Food Production Systems I (3)
Prerequisites: NUTR 132 and HFHM 235.

NUTR 132 Introductory Nutrition (3)
Prerequisites/Corequisites: One Foundation course.

NUTR 234 Orientation to Dietetics & Food Administration (2)
Prerequisites: None.

NUTR 331A Fundamentals of Human Nutrition (3)
Prerequisites: NUTR 132, BIOL 207, CHEM 302 or 327 or equivalent.

NUTR 331B Fundamentals of Human Nutrition (3)
Prerequisites: NUTR 331A.

NUTR 336 Cultural Aspects of Food and Nutrition (3)
Prerequisites: PSY 100 or SOC 100 or ANTH 120 or equivalent; NUTR 132.

NUTR 436 Advanced Nutrition (3)
Prerequisites: NUTR 331B, CHEM 448, 449 (may be taken concurrently).

NUTR 436L Nutritional Status Assessment Techniques (3)
Prerequisites/Corequisites: NUTR 436 and CHEM 449.

NUTR 438 Medical Nutrition Therapy (3)
Prerequisites: NUTR 436, 436L (may be taken concurrently)

NUTR 461 Community Nutrition (3)
Prerequisites: Upper-division standing, NUTR 331B.

Take one of the following courses:

ANTH 412I Culture and Communication (3)
Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

HCA 422I Global Issues in Health Services (3)
Prerequisites: GE Foundation, one or more Exploration courses and upper division standing.

H SC 420I International Health (3)
Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

Take one of the following choices:

BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.

or both

BIOL 342 Human/Mammalian Physiology (3)
Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better. Recommended: PHYS 100A, B.

BIOL 342L Lab in Human/Mammalian Physiology (1)
Prerequisites/Corequisites: BIOL 342 with a grade of "C" or better.

Take one of the following courses:

BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

ED P 419 Educational Statistics (3)
Prerequisites: Satisfactory completion of an undergraduate mathematics course suitable for general education math credit and, if required by the major, a lower-division statistics course.

H SC 403 Community Health Statistics (3)
Prerequisites: GE math and SOC 250 or PSY 210 or equivalent.

IS 310 Business Statistics (3)
Prerequisites: MATH 114.

Take one of the following courses:

ENGL 101 Composition (3)
Prerequisites: ENGL 100.

ENGL 317 Technical Communication (3)
Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Take one of the following courses:

HRM 361 The Human Resource Function (3)
Prerequisites: None.

PSY 381 Intro to Industrial Organizational Psy (3)
Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

Take one of the following courses:

IS 233 Introduction to Computer Systems and Applications (3)
Prerequisites: None.

IS 300 Management Information Systems (3)
Prerequisites: IS 233 or equivalent.

Take one of the following courses:

FCSE 497 Directed Studies (3)
Prerequisites: Upper division standing, consent of instructor.

NUTR 492K Internship in Nutrition and Dietetics (3)
Prerequisites: Student must be a Family and Consumer Sciences: Nutrition and Dietetics major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Nutrition and Dietetics; and HFHM 275, NUTR 331B and FSCI 332. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Take one of the following choices:

CHEM 327 Fundamentals of Organic Chemistry (3)
Prerequisites: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

or both

CHEM 320A Organic Chemistry (3)
Prerequisites: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

CHEM 320B Organic Chemistry (5)
Prerequisites: CHEM 320A with a grade of "C" or better.

Select one of the following choices:

CHEM 448 Fundamentals of Biological Chemistry (3)
Prerequisites: CHEM 327 or 322B either with a grade of "C" or better.

or both

CHEM 441A Biological Chemistry (3)
Prerequisites: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

CHEM 441B Biological Chemistry (3)
Prerequisites: CHEM 441A with a grade of "C" or better.

Take a minimum of 6 units of electives in consultation with a Nutrition and Dietetics faculty advisor.

Recommended electives include:

HFHM 375, 477; FCSE 497; NUTR 439, 492K.

If a stronger foundation in Chemistry is desired, CHEM 320A and 320B may be selected instead of CHEM 327. If a stronger foundation in Biochemistry is desired, CHEM 441A and CHEM 441B may be selected instead of CHEM 448.

Students who wish to take the Nutrition and Dietetics Option as a Pre-professional degree (e.g., medical, etc.) should check with the appropriate programs to verify specific requirements.

The Academy of Nutrition and Dietetics (AND) Didactic Program in Dietetics accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND)

The ACEND, the accrediting agency for the AND Didactic (Academic) Program in Dietetics (DPD), is designed to provide students with a foundation of knowledge and skills in dietetics that will enable them to perform successfully in a dietetic internship. The DPD is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the AND, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, phone: 312-899-0040, ext. 5400. This Council is a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education, It is the responsibility of the student to consult with the AND DPD Director to verify current ACEND requirements to become a Registered Dietitian.

Students who choose to meet DPD requirements must select the following as electives:

- HFHM 375 Food Production Systems II (3)
  Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 173 and 275.
- HFHM 477 Foodservice Administration (3)
  Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 375.

Student must receive a grade of “C” or better in DPD courses to receive verification of completion of the DPD program. Approval of a student’s academic program by the CSULB DPD Director requires that the student complete HFHM 477, NUTR 436L, and NUTR 438 at CSULB. Students can view details of the DPD program at www.csulb.edu/dpd.

Courses (NUTR)

LOWER DIVISION

132. Introductory Nutrition (3)

Prerequisite/Corequisite: One Foundation course.

Essential nutrients, their physiological functions and human needs during the life cycle; food sources as applied to selection of an adequate diet; problems encountered providing food to meet nutritional needs; food additives and consumer protection.

Not open for credit to students with credit in FCS 232. (Lecture-discussion 3 hours)

234. Orientation to Dietetics and Food Administration (2)

Role of the professional in dietetics and food administration; orientation to career opportunities in Food, Nutrition and Foodservice Systems Management; personnel and physical facilities, including equipment in health care and mass feeding programs.

(Lecture-discussion 1 hour, activity 2 hours)

UPPER DIVISION

331A. Fundamentals of Human Nutrition (3)

Prerequisites: NUTR 132, BIOL 207, CHEM 302 or 327 or equivalent.

Nutritional needs with emphasis on the physiological and chemical foundation for these needs; factors influencing nutrient needs.

(Lecture-Discussion 3 hours)

331B. Fundamentals of Human Nutrition (3)

Prerequisite: NUTR 331A.

Nutritional needs with emphasis on changes through the life cycle. Introduction to dietary modifications in various pathological conditions. Introduction to nutrition assessment and nutrition education techniques.

(Lecture-discussion 3 hours)

333. Latino Nutrition, Health and Chronic Disease Prevention (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses and upper division standing.

Explores nutrition-related and contextual factors associated with the high rates of chronic disease among diverse Latino-specific subpopulations and provide culturally-relevant strategies for prevention.

Letter grade only (A-F). Same course as HSC 333. Not open for credit to students with credit in HSC 333.

336. Cultural Aspects of Food and Nutrition (3)

Prerequisites: PSY 100 or SOC 100 or ANTH 120 or equivalent; NUTR 132.

Cross-cultural study of food and nutrition. Factors such as religion, food supply and socioeconomic status are considered as they influence nutritional status and food intake in various populations throughout the world.

(Lecture 3 hours)

339. Metabolic Functions of Nutrients (1)

Prerequisites: CHEM 140; BIOL 207, and consent of instructor.

Metabolic role of nutrients in the human body; practical application of nutrition to patient care.

Open to Nursing Majors only. (Activity 2 hours) Letter grade only (A-F).

436. Advanced Nutrition (3)

Prerequisites: NUTR 331B, CHEM 448, 449 (may be taken concurrently).

Metabolism of proteins, fats, carbohydrates, minerals and vitamins; interrelationship of nutrients; principles of determining nutritional requirements of individuals.

(Lecture-discussion 3 hours)

436L. Nutritional Status Assessment Techniques (3)

Prerequisites/Corequisites: NUTR 436 and CHEM 449.

Designed to provide training in nutrition assessment and nutrition counseling. Use of procedures for interviewing, counseling, and instructing patients/clients in various settings comparable to those encountered in dietetic practice. Includes laboratory methods for collection and interpretation of demographic, dietary, anthropometrics, biochemical, and clinical data.

Letter grade only (A-F). (Discussion 1 hour, Laboratory 3 hours, Clinical Practice 3 hours)

438. Medical Nutrition Therapy (3)

Prerequisites: NUTR 436, 436L (may be taken concurrently). Therapeutic nutrition. Metabolic changes in specific pathological conditions; dietary modifications used for treatment.

(Lecture-discussion 3 hours)

439. Nutrition and Aging (3)

Prerequisites: NUTR 132 or BIOL 207 or BIOL 301 or GERN 400I or consent of instructor.

Nutritional needs as related to physiological changes that occur during aging. Factors that influence food intake and nutritional status of the elderly. Diet adaptation for chronic diseases commonly found in older adults.

Letter grade only (A-F). Same course as GERN 439. Not open for credit to students with credit in GERN 439. (Lecture-discussion 3 hours)

461. Community Nutrition (3)

Prerequisites: Upper-division standing, NUTR 331B.

Survey of nutrition programs in the community. Techniques of program planning, implementation, management and evaluation.

Letter grade only (A-F). (Lecture-activity 3 hours)

468. Nutrition for Exercise and Performance (3)

Prerequisites: NUTR 132, KIN 301 for the KIN Fitness option and the KIN Exercise Science option or BIOL 207 for the Nutrition and Dietetics option.

Explores the role nutrients play in exercise and performance enhancement. Topics include evaluation of energy needs during physical activity, examination of weight management practices, assessment of nutritional status, and investigation of contemporary dietary issues related to exercise.

Letter grade only (A-F). Same course as KIN 468. Not open for credit to students with credit in KIN 468. Open to Kinesiology undergraduate students in the Fitness and Exercise Science options and to the Nutrition and Dietetics option in Family and Consumer Sciences.

492K. Internship in Nutrition and Dietetics (3)

Prerequisites: Student must be a Family and Consumer Sciences: Nutrition and Dietetics major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Nutrition and Dietetics; and HFHM 275, NUTR 331B and FSCI 332. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)