

**NUTRITION AND FOOD SCIENCES**  
**DIDACTIC PROGRAM IN DIETETICS**  
**CALIFORNIA STATE UNIVERSITY, CHICO**  
**Spring 2001**

**INTRODUCTION**

California State University, Chico (CSUC) is one of 23 campuses in the largest senior-level higher education system in the country, the California State University (CSU) System. The overall mission of the system, as defined by state legislation, is to offer baccalaureate and master's degree programs to the top one-third of high school graduates, emphasizing teaching over research. The mission of this system is complementary to, but distinct from, the University of California, a ten-campus system which offers degree programs from the baccalaureate to doctorate, and which accepts applicants from the top twelve percent of high school graduates. The California Community College system offers technical, vocational, and lower-division liberal arts programs to high school graduates.

Governance for the CSU System rests with the Statewide Board of Trustees, appointed by the Governor. The Chancellor (the chief executive officer of the CSU System) and the President of each campus are appointed by the Trustees. The funding base for the CSU System is primarily through state support, with the budget determined yearly by the state legislature.

California State University, Chico is the second oldest campus in the CSU System. It was originally founded as a normal school in 1887, designated as a teacher's college in 1921, and a baccalaureate granting institution in 1924. In 1935, it was designated a State College, and in 1949, authorized to grant the Master of Arts degree. In 1972, Chico State College was designated California State University, Chico. The institution's primary service area is the 12 county rural area in northeastern California, covering more than 35,000 square miles. While maintaining its distinct atmosphere as a residential campus, CSUC serves the state, the nation and the world through instruction, research, and public service (Appendix 1, WASC self-study, 1995, Vol. 1, p. 9). CSUC offers approximately 100 undergraduate degree programs, 40 master's programs, and 10 certificate programs to a student body of approximately 14,300 FTE (full-time student equivalents).

After the state legislative determines the statewide budget, the Chancellor makes allocations to individual campuses based on enrollment figures. Student fees contribute approximately 25 percent of the operating revenues of the campuses. The system is recovering from a period of unprecedented budget reductions, with a reduction of more than 10 percent occurring from 1990 to 1994.

Despite the severe budgetary problems of the past few years, the CSUC campus has continued to meet its mission. The most recent accreditation occurred in 1996 by the Western Association of Schools and Colleges (WASC). In a letter to University President Manuel Esteban, informing

him of the accreditation status, the WASC stated, "The team was impressed with the administrative leadership and the dedication of the faculty and staff. The University has developed strong undergraduate programs, established successful distance learning programs and created a remarkably supportive environment for students. There is a strong and deep base upon which to build the future of the University" (Appendix 2, Letter to CSU, Chico, President Manuel Esteban).

## **COLLEGES, SCHOOLS, AND DEPARTMENTS**

Within Academic Affairs, subject disciplines are grouped into various administrative units. There are nine colleges and interdisciplinary units, each representing a major segment of the academic community. These include the Colleges of: Agriculture; Behavioral and Social Sciences; Business, Communication and Education; Engineering, Computer Science and Technology; Humanities and Fine Arts; Natural Sciences; and the School of Graduate, International, and Sponsored Programs and Undergraduate Education. Within the colleges are individual departments that define specific disciplines.

## **CAMPUS ENVIRONMENT**

CSU, Chico is located in Butte County, about 100 miles north of Sacramento and is one of the largest urban areas between Sacramento and the Oregon border. CSU, Chico has the distinction of being a residential campus in a rural, northern California town. It attracts students from throughout the state, the country and the world. The student-to-faculty ratio is 20:1, the average class size is 22, and the student body is divided, nearly equally, between males and females. Seventy-six percent of the students live within walking or bicycling distance of the campus. Within the System, CSU, Chico regularly ranks first or second for the rate at which first-year students graduate, has the highest freshmen retention rate (81 %), and regularly leads in retention of transfer students (Appendix 3, Excerpts from University Catalog, pp. 1-2).

## **INTRODUCTION TO THE DIDACTIC PROGRAM IN DIETETICS**

*(Provide historical background, a brief description of the dietetics program organization, and a description of the constituencies involved in the self-analysis process)*

The didactic program in dietetics (DPD) has been in existence at CSUC since 1965. Dr. Evelyn Mar, R.D. was the driving force for the establishment of the program. At that time, the program was housed in the School of Home Economics, which subsequently became the School of Human Environmental Sciences, in the College of Agricultural and Human Environmental Sciences. Due to tremendous state budgetary losses in the early 1990s, cutbacks in programs were enacted throughout the state. As a result, the College of Agricultural and Human Environmental Sciences was eliminated in 1992; however, the DPD and its faculty were moved to the Department of Biological Sciences in the College of Natural Sciences. During this time period, the Program name was changed to Nutrition and Food Sciences (NFSC). The Program currently consists of six full-time and two or three part-time faculty members, and is supported by a full-time laboratory technician and office assistant.

The Bachelor of Science in Nutrition and Food Sciences currently requires a minimum of 128 units; 60 of which are General Education, Cultural Diversity or United States Government courses. These courses are designed to develop students' ability to communicate, increase analytical skills and reasoning, provide fundamental understanding of science and the natural world, foster multicultural awareness, further knowledge and appreciation of the arts, and promote citizenship. Major area courses for the DPD constitute another 66 units. The remaining two units are elective units and are most frequently completed as NFSC 289, Internship, with the student placed in a foodservice, health care, or nutrition education community setting. Approximately 10 units can "double count"; that is, fulfill both university requirements for General Education as well as for the major program requirements.

Students with a major in NFSC must complete the degree core, consisting of 36 units, as well as one of two options: one in Foodservice Administration, the other in General Dietetics. The option in General Dietetics is designed to meet the Foundation Knowledge and Skills for the Didactic Component of the Entry-Level Dietitian Education Program and the Standards of Education of The American Dietetic Association. This option constitutes the DPD. The majority of NFSC majors select the General Dietetics option. This option offers a strong academic program through a variety of courses and laboratory and field experiences. Students have the option to select elective courses or minors outside the major. Recommended minors include exercise physiology, chemistry, business, Spanish, and psychology. The program graduates approximately 25 students each year. The Foodservice Administration option and minor are being revitalized under the guidance of Drs. Sam Beattie and Faye Johnson after a five-year period of dormancy.

A formal Master's degree in Nutritional Sciences has been offered since 1985. Prior to that time, graduate students wrote "Special Major" Master's degrees to increase their knowledge in nutrition and food sciences. An AP4 was developed in 1990 and in 1999 became accredited as a dietetic internship program.

Despite the state budgetary situation, several improvements to the program occurred over the past decade. The number of students majoring in NFSC doubled between 1988, the date of the previous ADA approval application, and 1998. The faculty and the Program were relocated to Tehama Hall, a newly constructed building, in the spring of 1992. A basic food laboratory was constructed and funds were provided for new equipment.

Some significant changes in faculty occurred during the past decade. Dr. Kathryn Silliman, RD joined the faculty in 1990, at the rank of assistant professor, and teaches normal nutrition courses. She is now tenured and an associate professor and currently being reviewed for promotion to professor. Dr. Sam Beattie joined the faculty in 1998, as an assistant professor, to expand the food science program. Dr. Michelle Neyman, RD, an assistant professor, joined the faculty in the fall of 2000 in anticipation of the retirement of Dr. Barbara Kirks, RD. Dr. Neyman's academic emphasis is in the area of community nutrition. Dr. Cindy Wolff, RD, hired in 1987, continues to teach in the area of medical nutrition therapy. In 1995, Dr. Evelyn Mar, RD retired, and Dr. Faye Johnson, RD was reassigned from the area of food science to teach the food purchasing, management and administration courses.

A number of constituencies contributed to this Self-Study report. Faculty members contributed information specific to their areas of specialty. Additionally, they assumed responsibility for gathering information regarding specified sections, and reviewed and approved the final document. Faculty members included: Dr. Sam Beattie; Dr. Faye Johnson, RD; Dr. Barbara Kirks, RD; Dr. Michelle Neyman, RD; Dr. Kathryn Silliman, RD; and Dr. Cindy Wolff, RD. Dr. Faye Johnson, RD was the lead writer of the report. Student leaders from the Nutrition and Food Sciences Association (NFSA), the student organization within the NFSC Program, provided input and reviewed the final document. These individuals were Wendi Myers, current president, and Wendy Plemons, current vice-president. The NFSC Advisory Committee provided input for the writing of this document during fall semester meetings in 1998 and 2000. In addition, many alumni of the Program are employed in the north valley and are active in the Chico-based North Valley Dietetic Association (NVDA), a sub-group of the Golden Empire District in Sacramento. At least one Program faculty member has served on the NVDA Board every year since 1987. Current NFSC students also attend NVDA meetings. Hence, participation in the NVDA provides opportunities for frequent contact between Program alumni, students, and faculty. Survey data collected from senior-level students, alumni, internship directors, and employers were also used in the writing of this report. Examples of how input from various groups was utilized are presented in Standard 5.

In addition to the NFSC faculty, this Self-Study was approved by the following:

1. Chair of the Department of Biological Sciences, Dr. Michael Abruzzo
2. Dean of the College of Natural Sciences, Dr. Roger Lederer
3. CSUC President, Dr. Manuel Esteban

## STANDARD ONE

**Standard One:** The Mission Statement or philosophy and measurable goals for the program shall provide guidance to the program.

**Principle:** Philosophical premises underlie the establishment and nature of any planned program. The philosophical basis determines the goals to which the program is directed. Identification, articulation, and on-going re-examination of the philosophy and goals of an educational program enable the program faculty to progress, and the program to develop in an efficient, planned manner.

*Criterion 1.1. The Mission Statement or philosophy of the program shall reflect the environment in which the program exists and be compatible with the Mission Statement or philosophy of the sponsoring institution and Standards of Practice of The American Dietetic Association.*

### Mission Statement of California State University, Chico

The Mission Statement of California State University, Chico includes the following: "The first priority is the education of our students by creating and maintaining selected high quality undergraduate and graduate programs." Five priority statements were developed to support the Mission Statement. The first priority is: "...to continue to develop high quality learning environments both in and outside of the classroom." All curricular decisions are based on the Mission Statement and the Priorities (Appendix 3, University Catalog Excerpts, pp. 3-4).

### Mission Statement of the College of Natural Sciences

The College Mission Statement states that "(it) will provide...rigorous theoretical and practical training required to make (our students) successful and contributing citizens, both professionally and personally" (Appendix 3, University Catalog Excerpts, p. 5).

### Goals of the Department of Biological Sciences

A commitment by the faculty in the Department of Biological Sciences to prepare competent individuals for science-related careers is expressed in Department Goal # 9. This goal states, "To graduate students trained within a specific area of biology providing them with the factual knowledge and the modern study techniques needed to continue within their chosen field" (Appendix 4, Goals of the Department of Biological Sciences, p. 2).

### Mission Statement of the Program in Nutrition and Food Sciences

The DPD has been an approved or developmentally accredited program since 1965. Since that time, it has offered an educational program in accordance with the Standards of Education set forth by CADE and prepared many individuals to participate in Supervised Practice Programs and become Registered Dietitians. The central mission of the Program is to prepare students to be competent and productive members of the dietetic profession. This Mission Statement is in

harmony with that reported in the 1988 Self-Study Report; that is, "...to ensure quality education and the preparation of competent entry-level dietetic professionals" (Appendix 5, Excerpt from the 1988 Self-Study Report).

Mission Statements of CSU, Chico and the College of Natural Sciences, and Goals of the Department of Biological Sciences emphasize the delivery of high quality education programs to prepare students to be competent professionals. The Mission Statement of the DPD is in congruence with these Mission Statements, Goals, and the Standards of Education, and is as follows:

*It is the Mission of the DPD at CSU, Chico, to prepare students to become competent and productive members of the nutrition and food sciences profession. This is achieved through the delivery of a high quality curriculum and experiential activities in accordance with the Standards and Practices of the American Dietetic Association.*

**Criterion 1.2.** *Measurable goals for the program shall reflect the Mission Statement or philosophy and are the basis for the evaluation of program effectiveness.*

Measurable goals for the DPD are based on and directly related to the Mission Statement of the Program. They are as follows:

1. Ninety percent or more of students who complete all General Dietetics option requirements will receive a Bachelor's degree and, by virtue of achieving a minimum GPA of 2.0, be eligible to receive a signed DPD Verification of Completion form.
2. Ninety percent or more of graduates who complete a Supervised Practice Program (dietetic internship or approved pre-professional practice program) will indicate that they were well prepared by the NFSC program.
3. Ninety percent or more of graduates who complete a Supervised Practice Program will receive a passing score on the Registration Examination for Dietitians.
4. Eighty percent or more of graduates who complete the General Dietetics option, but who do not participate in a Supervised Practice Program, will indicate that they are well prepared for their first career-related position following college graduation.
5. Seventy percent or more of graduates will be employed in positions that require knowledge gained in their undergraduate program unless they choose to not be so employed.

These goals form the basis for program evaluation that is described in Standard 5.

This self-study report is written according to the CADE Pilot Test, Draft 2: Self-Study Format, September 1999.

## STANDARD TWO

**Standard Two:** A program shall be accountable to its students.

**Principle:** Fair, equitable, and considerate treatment of both prospective students and those enrolled in an educational program will be incorporated into all aspects of the program.

**Criterion 2.1.** *A current and accurate description of the program shall be available to prospective students and include:*

- *Type and description of the program including Mission Statement*
- *Description of how the program fits into the credentialing process for dietetics practitioners*
- *Cost to the student*
- *Accreditation status*
- *Admission requirements*
- *Computer matching information (NA for DPD)*

Many students contact the CSU, Chico Admissions Office to gain information about the university, its departments and programs, and other relevant topics through a variety of methods, including the University's web site ([www.csuchico.edu](http://www.csuchico.edu)). Two mailings are sent to prospective students. If the student identifies an interest in dietetics, a second mailing to the student includes an excerpt from the University Catalog relating to the Program, the NFSC brochure, and a letter from the Program Coordinator welcoming the student to the Program (Appendix 6, Admissions Office mailings).

The university brochure, "Today Decides Tomorrow" is a part of the first mailing from the Admissions Office. The back page of the brochure lists all undergraduate majors, options, and patterns or concentrations available at CSU, Chico. General Dietetics is shown as an option under the NFSC major (Appendix 7, "Chico: Today Decides Tomorrow", back cover). The brochure also provides information about cost of attendance and admission requirements, as well as several other topics of interest to prospective students.

The first detailed information that many students obtain about the DPD is through the CSU, Chico web site. Prospective students can access the Nutrition and Food Sciences web site directly by entering the following URL: [www.csuchico.edu/nfsc/](http://www.csuchico.edu/nfsc/). By selecting "Prospective Student Information," interested individuals can see the student brochure as well as links to pages in the University Catalog that describe expected student costs and admission requirements.

The NFSC brochure clearly delineates the following:

- Information regarding the Program that states that students who wish to become Registered Dietitians must complete the core requirements and the option in General Dietetics, as well as other University mandated requirements for graduation as a part of their educational preparation for the profession.
- The Program's Mission Statement and Goals.

- A stepwise explanation of how the Program fits into the credentialing process for the dietetic practitioner.
- The Program's accreditation status is stated as follows: "The Didactic Program in Dietetics at California State University, Chico is currently granted Developmental Accreditation by the Commission on Accreditation for Dietetics Education of The American Dietetic Association, 216 W. Jackson Blvd., Chicago, IL 60606-6995, (312) 899-4876."

The brochure provides links to University Catalog pages that provide information about expected student costs including application fee (\$55) and semester registration fees (e.g., state university, student activity, student union, instructionally related activities, health services, and health facility fees). The ID card is an additional cost. Total cost for a California resident student enrolled in more than 6.1 units is \$1,054. These University Catalog pages also provide information about non-resident and miscellaneous fees (e.g., penalty and parking), payment plans, and financial aid (Appendix 3, University Catalog Excerpts, pp. 6-8).

Another link connects the student directly to the page in the University Catalog that delineates undergraduate admission requirements. Students qualify for regular admission to the university provided they: 1. Are a high school graduate, 2. Earn a qualifying eligibility index score, and, 3. Have completed specified courses with a grade of C or better. A more comprehensive description of factors related to admission is located in the Appendices section of this report (Appendix 3, University Catalog Excerpts, pp. 9-13).

A copy of the NFSC web site is located in Appendix 8.

***Criterion 2.2.*** *A current and accurate description of the program shall be available to enrolled students in a bulletin, catalog, manual, or other program materials.*

Requisite information referenced in this criterion is contained in the Student Handbook. It is available in both hard copy and from the NFSC Home Page on the web. Hence, prospective students have access to this information. The Handbook is given to each student by his/her academic advisor and its contents reviewed with the student. The Student Handbook is updated every two years, coinciding with the publication of the new edition of the University Catalog.

The requisite information referenced in this criterion is located in the Student Handbook (Appendix 9) on page numbers as indicated.

<u>Topics</u>	<u>Pages</u>
Program Mission Statement	1
Measurable goals for the program	1
Academic/program calendar or schedule	8*
Graduation and/or program completion requirements	3-7
Accreditation status	1

More specific cost information than that given to prospective students by Admissions	2
Description of how the program fits into the credentialing process for dietetic practitioners	3, 7, 12

\* Refers student to University Catalog and Schedule of Classes.

**Criterion 2.3:** *Admission requirements and procedures shall protect student civil rights and comply with institutional equal opportunity programs.*

The CSUC Policy on Nondiscrimination and Affirmative Action in Employment and Education (June 24, 1999, Executive Memorandum 99-24) is located in Appendix 10. The University Catalog carries an identical statement (Appendix 3, University Catalog Excerpts, p. 14).

**Criterion 2.4:** *Written program policies and procedures shall be available to all students enrolled in the program, protect the rights of students and be consistent with current institutional practice.*

Several policy and procedure statements are located in the University Catalog. Copies of the statements are included in Appendix 3, University Catalog Excerpts. The page number shown below refers to the location of the policy and regulation statements in Appendix 3. These include the following:

<u>Policy and Procedure Statements</u>	<u>Pages</u>
Withdrawal and refund of tuition and fees	19-20
Scheduling and program calendar	21-24
Statement of equal opportunity	25-26
Protection of privacy of information	27-28
Access to personal files	28
Access to student support services	29-35
Graduation and/or program completion requirements	36-39
Grievance procedures	40
Disciplinary/termination procedures	40
Vacation, holiday, and absence polices	21-24; 41

Information about policies and procedures not directly addressed in the University Catalog and required by this criterion are shown below with the location of their documentation.

- Insurance requirements, including those for professional liability Student Handbook, p. 8 (Appendix 9)
- Injury or illness while at the facility for supervised practice Student Handbook, p. 8 (Appendix 9)
- Formal evaluation of students and regular reports of performance and progress at specified intervals throughout Student Handbook, p. 7 (Appendix 9)

the program, such as within any given unit, segment or rotation of a planned learning experience.

A statement of regional accreditation is located in the Appendices (Appendix 3, University Catalog Excerpts, p. 41).

*Criterion 2.5. This criterion does not apply to DPD.*

## Standard Three

**Standard Three:** Resources available to the program shall be identified and the contribution to the program described.

**Principle:** Resources are necessary for effective education to occur in a dietetics education program. Resources include competent and sufficient administrators and faculty, support personnel, and adequate services to provide for the planned education of students.

**Criterion 3.1:** *The program shall provide evidence that the administrative and financial support, learning resources, physical facilities, and support services needed to accomplish the measurable goals for the program are available.*

### Administration

The DPD is a part of the Department of Biological Sciences in the College of Natural Sciences. The Program receives strong support from the chair of the department, dean of the college, and colleagues in the College of Natural Sciences. Some examples of recent support include the following. During the past five years, the four eligible NFSC faculty members were granted sabbatical leaves. NFSC faculty members regularly receive grant money from The Center for Excellence in Teaching and Learning (CELT) to attend conferences, meetings, and conduct small research projects. The department covered the expenses for the DPD Director to attend the CADE sponsored 2000 Self-Study/Site Visit Workshop in Chicago, and annually funds her attendance at the Area I DEP meeting in Asilomar, CA. Additional evidence is that in 2000, four of the six full-time faculty members received new computers, as did one of two staff members.

Please see Criterion 5.2 for a description of how the Program fits into the Academic Affairs portion of the University.

Program faculty members elect, from within their ranks, a member who will serve as coordinator for the program. Dr. Barbara Kirks, RD served as coordinator for the past decade. In anticipation of Dr. Kirks' retirement, Dr. Cindy Wolff was elected to the position in the spring of 2000. The coordinator represents the faculty and the Program to the department chair. All faculty members have direct access to the chair; however, administrative tasks such as scheduling and staff evaluations are handled by the coordinator. The coordinator receives approximately three units of release time each semester to accomplish these tasks. The NFSC faculty members meet weekly or biweekly to discuss topics of concern or simply to foster communication.

### Human Resources

The NFSC Program generates approximately 120 FTE, 20-25 percent of the FTE for the Department of Biological Sciences. NFSC major area courses generate 50-55 FTE while the General Studies courses result in 65-70 FTE. Teaching coverage for NFSC area courses by full-time tenured or tenure-track faculty members is excellent.

The Program faculty consists of six full-time members, five of whom hold the RD credential. The full-time faculty will number five in the spring semester of 2001. Dr. Kirks is teaching part-time this semester in anticipation of retirement during the summer 2001. She will continue to teach part-time for a maximum period of five years. In addition, the Program includes two or three part-time members (1.5 positions), depending on whether any of the full-time members are on leave, have release time, and what the student demand is for the courses taught by the part-time faculty members. Generally, part-time faculty members do not teach DPD required courses. Rather, they teach the two General Education courses offered by the Program, that is, NFSC 025, Basic Nutrition and NFSC 123, Nutrition and Physical Fitness. The General Education courses are coordinated and supervised by two full-time faculty members, Drs. Kathryn Silliman, RD and Cindy Wolff, RD.

### Financial Support

Financial support for the Program by the Department of Biological Sciences and the College of Natural Sciences is very good. Rarely is a request refused and the administrators place little pressure on the faculty and staff members to be frugal. The Program does not have a separate budget; rather it is included as a part of the department budget. During the 1999-2000 academic year, the operating budget allocation from the college to the department was approximately \$500,000. Included in this amount are salaries for teaching and graduate assistants and part time faculty, equipment, work study, travel, and service contracts. The NFSC Program had a line item budget of \$7,823 for general supplies and services. Included in this category are laboratory supplies and related items. Office supplies, printing, phone, and postage are provided in addition to the NFSC line allocation. Full-time faculty salaries and benefits totaled \$516, 505 in the 1999-2000 academic year (Appendix 13).

### Learning Resources

Learning resources available to students at CSU, Chico are excellent. The library contains over two million items, including books, bound periodicals, journals, and state-of-the-art electronic resources, in addition, the library is a repository for state and national governmental publications. It carries approximately 100 journals and other publications of relevance to students in the DPD. A listing of these holdings is shown in Appendix 14. The general library is open and staffed approximately 90 hours/week although a student computer lab is open and available for student use 24 hours/day, 7 days/week. One librarian serves as the resource librarian and has special responsibility for the information resources related to NFSC. In this capacity, she meets with the faculty once or twice a year to gain information about interests and needs of the Program. Librarian-led and self-guided instruction regarding the use of the library is available to all students and faculty members.

The Instructional Media Center (IMC) is located in the basement of the library. It provides support for faculty and students with regard to the production or campus distribution of photography, graphic design, computer graphics, and video material. Laboratories are equipped with necessary equipment and staffed by knowledgeable individuals who assist and train faculty members and students in the preparation of their materials. Additionally, IMC staff will create

media resources for faculty members. Each faculty member receives an annual allotment of \$500 to use in this manner.

### Computer Assistance for Faculty

Every tenured and tenure-track faculty member on the CSU, Chico campus has a personal computer for their use. Support for faculty computer work is excellent. The Faculty Help Line (x6000) is available 40 hours/week to respond to individual questions about software usage and other related needs of faculty members. In addition, a .5 position in the College of Natural Sciences is allocated to a staff person who provides assistance with the installation and use of hardware and software as requested. The Technology and Learning Program (TLP) is open 40 hours/week and is staffed with several knowledgeable individuals who will assist faculty with the technology required for placing courses on WebCT (software providing tools and services for student web based instruction). Numerous classes are held throughout the semester and during academic year breaks to provide this education to faculty members.

### Computer Availability for Students

The campus has many free open access computer laboratories for student use, including in the residence halls. Students have ready availability to e-mail and Internet services. The Student Computing Center provides free workshops and help services through e-mail and telephone contact. Two of the laboratories, one in the library, the other in Tehama Hall, have 24-hour access. One laboratory in Holt Hall is especially designed for students in the Department of Biological Sciences and has 12 computers, both MAC and PC machines. Students in the Program also have ready access to approximately 100 other computers in various laboratories in the College of Natural Sciences. Most NFSC students have their own computers.

### Physical Facilities

Physical facilities on the CSU, Chico campus are sufficient to allow the Program to meet the DPD course requirements. First priority scheduling assignment for nearly 200 rooms, including classrooms, laboratories, preparation rooms, and offices, is given to the Department of Biological Sciences. Faculty members never encounter problems obtaining classrooms for regularly scheduled classes. The classrooms, offices, and support areas for the exclusive use by NFSC Program and its faculty are indicated in Appendix 15.

Of special note is Tehama 118 and 134. Tehama Hall, where the NFSC Program is located, was constructed in 1992. At that time, a basic food laboratory was built and supplied with new equipment, including demonstration and media equipment. In 1994, the university installed an interior doorway between Tehama 134 and 118, to facilitate the use of Tehama 134 as a food tasting room and as a general classroom for other NFSC courses. Approximately one-third of the DPD courses are taught in this room which contains media equipment and other usual teaching tools. The food laboratory consists of six range tops, four refrigerators, a bank of eight ovens, and three dishwashers, in addition to usual equipment.

Holt 225, 259 and 261, science wet laboratories, are used by students in NFSC 126L, Nutrition Assessment Laboratory, and NFSC 120, Science of Food. These laboratories are supplied with the usual equipment. Additional equipment is available in the lab for NFSC 126L, Nutrition Assessment Laboratory including calipers and measuring devices for anthropometry studies, a centrifuge for hematocrit readings, a reflotron to measure total blood cholesterol, and spectrophotometers for various experiments. Holt 259, the room where part of the Science of Food laboratory is taught, also contains equipment that allows for the conducting of proximate analysis of foods. These include micro-Kjeldahl and fat extraction apparatuses, balances, moisture analyzers, and a bomb calorimeter. The majority of NFSC 120 laboratory sessions take place in the food laboratory, Tehama 118. These laboratory projects include rheological, texture, and sensory analyses, product development and other projects not requiring a wet laboratory.

The CSU, Chico campus has 22 "smart" classrooms; so designated because they contain computers with Internet access and are fully loaded with educationally-related software. In addition, they have a connection for a portable laptop computer. The rooms also have built-in large screen VCR projection systems, high fidelity and/or surround sound systems, and touch screen controller for all room functions. Faculty members may obtain usage of these rooms by presenting a justification for the need to the department chair. All of the full-time NFSC faculty have taken advantage of the new technology and use "smart" classrooms; three use them as regularly scheduled classrooms, when available. The Program has a portable visual/data presenter that can provide computer projection if a "smart" classroom is not available or when the need for one is on an infrequent basis. "Smart" classrooms, as well as standard rooms, are equipped with overhead projectors, slide projectors, and film and video playback systems.

#### Faculty Offices, Program Office and Technician Preparation Areas

All faculty members have private offices that enhance their ability to advise students. Each office is equipped with a private telephone and computer with Internet access. Printing and FAX services are provided through the Program office in Tehama 124. The Program clerical assistant and laboratory technician are located in the Program office. Each staff member has a personal computer. Tehama 122 is adjacent to the Program office. The photocopier and supplies are stored in this room as are two laptop computers, a desktop computer, a video camera, and the visual/data presenter. These are available for classroom use on a signed check out basis and are kept in locked cabinets. A portable television and VCR are stored in Holt 225. The laboratory technician's preparation area co-joins the food laboratory. It consists of a commercial refrigerator and freezer, microwave oven, range top, oven, and carts, as well as numerous smaller pieces of equipment and supplies.

#### Equipment

Some of the major pieces of equipment used for instruction in the DPD were described in the "Physical Facilities" portion of this criterion. An inventory of equipment utilized primarily by NFSC faculty and students is shown in Appendix 16, while those readily available to the Program through the Department of Biological Sciences are shown in Appendix 17. Support for equipment for the Program is good. During the 1999-2000 academic year the Program received several pieces of equipment. These included: a Bioelectrical Impedance Analyzer (BIA)

machine (\$5,000); recording thermomister/thermocouples, digital thermocouples, gas chromatograph, and a variety of smaller laboratory items (\$20,000); 4 new computers for faculty (\$8,000); one new computer for a staff member (\$2,000); and a new printer (\$1,000) for the Program office.

### Staff Support Services

Two full-time employees provide support to the Program. They include a laboratory technician and a clerical person. The laboratory technician is responsible for the preparation, stocking and maintenance of the basic food, nutrition assessment and food science laboratories. She prepares market and purchase orders, purchases supplies and ingredients, and maintains the laboratory budget for each class. The technician also serves as the Program's computer assistant for students. In this capacity, she holds 5 regularly scheduled hours of computer laboratory time to assist students with various assignments and projects. An added responsibility for the Program technician is that she serves as the Webmaster for the NFSC web page. The NFSC Program's full-time clerical person is responsible for typing/formatting and duplication of materials as requested by faculty members. She also responds to requests for information regarding the Program. The budget for the Program allows for the hiring of additional clerical assistance, as needed, such as for the preparation of this Self-Study document.

***Criterion 3.2:** The program shall seek advice on an ongoing basis from individuals or groups outside of the program.*

The NFSC Advisory Board is the primary mechanism for obtaining information regarding the program on a biennial basis. This board, consisting of approximately 20 professionals, meets during the fall semester. Prior to the meeting, an agenda, along with supporting documents is mailed, so that meeting time can most effectively be utilized. Examples of how the Board's input has resulted in programmatic improvement are explained in Criterion 5.4. Minutes of past meetings are shown in Appendix 18. A listing of the current NFSC Advisory Board members is also provided in Appendix 18.

***Criterion 3.3:** Each accredited/approved program shall designate a Program Director, who is employed by the sponsoring institution.*

Dr. Faye Johnson, RD has been a faculty member at CSU, Chico since 1976, during which time tenure and rank of professor were attained. She has been DPD Director since 1992. The position description, enumerating the responsibilities for the DPD Director, is shown in Criterion 5.2. The Director receives no release time to conduct the work associated with the position. However, each fall semester the Director teaches a one-unit class, NFSC 229, Issues in Nutrition and Food Sciences, in which many topics related to the profession and preparation to become a RD are presented and discussed with the entire class. This format provides for considerable efficiency of time since it allows for the presentation of information to a group of students rather than providing the same information numerous times to individual students. The Director is available to respond to individual questions in or outside of class. The Director is on campus many hours

beyond those required by the class schedule or office hour requirement and, therefore, is readily accessible to students. A concluding project for the NFSC 229 class involves having the students complete an application to a supervised practice program, graduate school, or for employment.

An attempt was made to change NFSC 229 to 2 units. This failed due to the DPD already being a high-unit major (66 units) and the need for the Director to teach other courses. It is the opinion of the DPD Director, based on personal observations and student comments, that the students have ample opportunities for contact with her and receive quality advising. The Director also is a frequent guest speaker at NFSA, the student organization, and uses this forum to present information about the profession.

***Criterion 3.4:*** Documented qualifications for the Program Director shall include credentialing as a Registered Dietitian by the Commission on Dietetic Registration and a minimum of a Master's degree.

The Director of the DPD Program has been a Registered Dietitian since 1979; the registration number is: 491364 . See Appendix 19 for a copy of the registration card. The Director received a doctoral degree from the University of the Pacific in 1984. Her vita will be available on site.

***Criterion 3.5:*** Individual faculty shall demonstrate competence appropriate to their teaching responsibilities. In addition faculty at regionally accredited colleges and universities shall meet the institution's criteria for appointment.

Faculty members teaching courses in the DPD hold full-time tenured or tenure-track appointments. Three members hold the rank of professor, one has associate professor status, and two are assistant professors. All NFSC faculty members meet the university's criteria for appointment (Appendix 20) and their vitae are available for review on site. The following is a summarization of their educational backgrounds, DPD courses usually taught, and recent professional experiences.

<b>Faculty Member</b>	<b>Usual DPD Courses</b>	<b>Experiences</b>
Sam Beattie PhD	NFSC 20, 120	Supervision of graduate student research, consultant with food processors, current researcher on \$100,000 in grants; HAACP and ServSafe® certified.
Faye Johnson EdD, RD	NFSC 20, 160, 229, 224, 261, 262	Supervision of graduate student research; recent study of management and administration, UC, Davis; attendance at numerous conferences relating to

Barbara Kirks            NFSC 127, 222, 227  
MPH, EdD, RD, CLE

teaching areas. Certified  
ServSafe® Trainer of Trainers.

Supervision of graduate  
student research; consultant  
California Regional Centers,  
California Department of  
Health Services WIC  
Program and Department  
of Education, Child Nutrition  
Services; nutrition counselor  
for individuals and groups.

Michelle Neyman        NFSC 222, 227  
PhD, RD

Supervision of graduate  
student research, several  
published articles, attendance  
at numerous conferences  
related to teaching areas.

Kathryn Silliman        NFSC 125, 126L, 225  
PhD, RD

Supervision of graduate  
student research, recipient  
of several research grants  
and awards; 17 published  
articles, papers, and books;  
attendance at numerous  
conferences related to  
teaching areas.

Cindy Wolff, MPA        NFSC 126, 226  
PhD, RD

Supervision of graduate  
student research; nutrition  
counselor for individuals and  
groups; recipient of several  
research grants and awards;  
many published papers and  
textbooks, and more than 20  
conference papers; attendance at  
numerous conferences  
related to teaching areas.

***Criterion 3.6: This criterion does not apply to DPD.***

***Criterion 3.7: This criterion does not apply to DPD.***

***Criterion 3.8:*** *Written agreements signed by administrators with appropriate authority shall be in effect and on file which delineate the responsibility between the sponsoring institution and affiliating institutions, organizations, and/or agencies.*

Written agreements are in effect with all off-campus locations where students achieve "demonstrated ability" in a competency. Copies of these agreements are available for inspection on site.

## Standard Four

**Standard Four:** The curriculum shall provide for attainment of the expected competence of the program graduate.

**Principle:** An entry-level dietetics education program is based on expected knowledge, skills, and competencies required to practice dietetics as defined by The American Dietetic Association. The curriculum sequentially builds knowledge, skills, and competencies for each student. The curriculum will vary with the program environment, the type of program, measurable goals and outcomes for the program, and student needs.

**Criterion 4.1:** *The curriculum shall be consistent with the mission statement or philosophy and measurable goals for the program.*

### Relation to Mission Statement

The Program's Mission Statement is congruent with the goals of the Department of Biological Sciences, College of Natural Sciences, and CSU, Chico; that is, to provide a high quality education to students that prepares them to become productive members of their profession. The Mission Statement of the DPD is one of long-standing: to prepare students to become competent and productive members of the dietetic profession through the delivery of a high quality curriculum based on the Standards and Practices of The American Dietetic Association. Every course required in the DPD contributes to meeting the foundation knowledge and skills for the didactic component of entry-level dietitian education programs. Ninety percent of students enrolled in the NFSC program follow the DPD curriculum.

### Relation to Program Goals

The first goal for the Program is to meet the educational needs of students in a manner that enhances the likelihood of their academic success. Academic success is defined as meeting the minimum university GPA standard for graduation (overall GPA of 2.0) and earning a minimum of a 2.0 GPA in courses required in the DPD curriculum. Achievement of this goal is based on the percent of DPD Program graduates who are eligible to receive an ADA Verification of Completion form.

The second goal for the Program is to insure that students are well prepared for post graduation participation in Supervised Practice Programs. Achievement of this goal is based on the percent of graduates who respond favorably to the survey instrument querying level of satisfaction with their educational preparation for participation in a Supervised Practice Program and on the survey results from Supervised Practice Program Directors.

The third goal for the Program is to offer a curriculum that optimizes achievement of a passing score on the Registration Examination for Dietitians for those graduates who complete a Supervised Practice Program. Measurement of this goal is based on the percent of CSU, Chico Program graduates who pass the examination.

The fourth goal for the Program is to offer a curriculum that ensures that those students who do not become Registered Dietitians are well prepared for their first career-related position following graduation. Achievement of this goal is based on the percent of graduates who respond favorably to the survey instrument querying their satisfaction with their educational preparation at the time of their first career-related position, as well as on the survey results from employers of our alumni.

The fifth goal for the Program is to provide a curriculum that optimizes the development of skills and knowledge required for employment in nutrition, food service administration, and food science positions, unless graduates choose to not be so employed. Achievement of this goal is based on the percent of graduates who respond that they are employed in a position that requires discipline specific knowledge.

A copy of the survey instrument sent to alumni is located in Appendix 21.

***Criterion 4.2:*** *The curriculum shall be based upon the required Foundation Knowledge and Skills and/or Competency Statements for credentialing eligibility as a Dietetic Technician Registered or Registered Dietitian.*

Appendix 22 contains a spreadsheet showing each competency statement and the courses in the CSU, Chico DPD curriculum that meet them. The curriculum evaluation process to ensure compliance with the fourth edition of the Standards of Education began about three years ago. Faculty members were given copies of Form 4A and identified competencies addressed in the courses they teach. Discussions at meetings centered on redundancy in meeting some competencies and lack of coverage for others. Significant changes occurred in the Food Administration and Medical Nutrition Therapy-related courses due to the need to meet the Demonstrated Ability competencies. Students enrolled in NFSC 261, Foodservice Procurement and Management and NFSC 262, Foodservice Equipment/Production now develop a portfolio based on the administration of a facility of their choice. Financial management competencies were addressed in portfolio assignments as well as weekly assignments using cost control text/work books. Assignments required the students to demonstrate their ability to fulfill many of the competencies listed in E.3 and G.3. An additional benefit to the portfolio is that it serves as a model for students to show prospective employers, demonstrating their ability to perform these essential functions. Samples of portfolios will be available on site for inspection by the team members.

As a result of the Program's compliance with the recent edition of Standards of Education, portions of NFSC 225, Advanced Human Nutrition, and NFSC 226, Seminar in Medical Nutrition Therapy, are devoted to alternative nutrition and herbal therapies. Basic knowledge regarding exercise physiology has been added to NFSC 225 and NFSC 126L, Nutrition Assessment Laboratory. NFSC 126L was added to the NFSC curriculum in Spring 2000. Nutrition assessment competencies had previously been addressed in a three unit course that also addressed the nutrition education competencies. Beginning in Spring 2000, these two content

areas have been separated into the two distinct courses, NFSC 126L, Nutrition Assessment Laboratory and NFSC 222 Nutrition Counseling and Education.

A listing of the competencies by the courses in which they are covered is shown in Appendix 23.

**Criterion 4.3:** *Not applicable for DPD.*

**Criterion 4.4:** *Both didactic and practice-related learning experiences shall be included in the curriculum in accordance with the type of program to develop communication, collaboration, problem-solving, and critical thinking skills.*

The catalog description of all of the courses required in the DPD is located in Appendix 24. All course syllabi will be available during the site visit and are also available on the NFSC web site.

### Communication

Program management goals are delineated in Criterion 5.7. Goal 3 of this report. One of these goals specifically states that the NFSC program will, "Develop communication, problem solving, computer and presentation technology, and critical thinking skills." During the preparation of the Self-Study, it became apparent that skills noted in this criterion are strengths of the Program. This conclusion is based on the emphasis faculty place on the fulfillment of competencies that are directly related to these skills, personal communication with alumni graduating in the past three years, and on feedback from NFSC Advisory Committee members.

The five communication competencies addressed in the largest number of classes include:

<u>Competency</u>	<u># of Courses</u>
A.1.2. BK Lay and technical writing	8
A.2.1. BK Interpersonal communication skills	8
A.3.5. DA Use current information technologies	11
A.3.6. DA Work effectively as a team member	13
E2.09. WK Role of food in promotion of a healthy lifestyle	8

All of the above competencies have a central core of effective communication. Essentially all of the assessment methods specified for the approximately 100 competencies in the Foundation Knowledge and Skills for Didactic Component of Entry-Level Dietitian Education Programs shown in Appendices 22 or 23 include some form of communication. Examples include audiotape productions, written assignments, classroom discussions, and Internet assignments. In addition, the university requires that each program specify a course in which technical writing in the major area is an essential component. Satisfactory writing skills are required to pass the course. NFSC 224, Cultural Food, is the Writing Proficiency course. This designation is noted on the course syllabus and in the Class Schedule (Appendix 25).

## Collaboration

This skill is not listed as one of the program goals nor is it included in the program management goals. However, an evaluation of "Assessment Methods" in Appendices 22 or 23 reveals that faculty members value student collaboration experiences; such that many of the assessment methods involve student collaboration. Students are required to demonstrate their ability to work effectively as team members in the completion and presentation of team projects. Examples include guided classroom discussions, in-class activities, laboratory activities, team critiques, seminar presentations, web page assignments, case study presentations, and group projects. An analysis of course syllabi reveals that nearly every course has one or more activities that include student collaboration.

## Problem Solving

Problem solving is included as a program goal statement. While it is not often specified in the "Assessment Methods" as "problem-solving", it is an integral part of many laboratory activities, case studies, guided classroom discussions, and team projects. An analysis of course syllabi reveals that nearly every course has one or more activities that require problem solving. For example, the development of this set of skills is facilitated when students perform laboratory activities in NFSC 126L, Nutrition Assessment Laboratory and in NFSC 120, Science of Food, as well as when completing the two major projects in the foodservice management courses.

Program graduates indicated satisfaction with their preparation in communication, collaboration and team building, and problem solving skills. An evaluation of alumni responses to the survey item addressing their education preparation in communication revealed a mean of 4.5 on a 5 point Likert scale (where 5=strongly agree). A mean of 4.4 was obtained for the survey item addressing alumni attitudes regarding NFSC curriculum based opportunities for the development of team building skills. A mean of 4.4 was also obtained in response to the survey item addressing satisfaction with opportunities to develop problem solving skills. These data are shown in Appendix 26.

## Critical Thinking Skills

NFSC faculty identified the development of critical thinking skills as one of our program management goals. This skill set is addressed in every upper division course. Examples of strategies used to develop critical thinking skills include the following: critique and discussion of original research articles (NFSC 225, Advanced Human Nutrition and NFSC 226, Medical Nutrition Therapy); oral and written presentation of nutrition assessment results and nutrition care plans using case studies (NFSC 126, Clinical Nutrition and NFSC 226, Medical Nutrition Therapy); analysis and interpretation of data in laboratory situations (NFSC 120, Science of Food, NFSC 126L, Nutrition Assessment Laboratory, NFSC 261, and NFSC 262).

A specific Likert scale statement addressing critical thinking skills was not included in the current alumni survey. Items to assess satisfaction with NFSC curriculum development of this skill set will be included in future surveys.

***Criterion 4.5:*** *Planned learning experiences shall be offered in a logical progression from introductory to the expected competence of program graduates.*

The General Dietetics 4 year planning guide (Appendix 27) and Course Flow Sheet (Appendix 28) show the logical progression from introductory courses to capstone courses. Both of these documents are located in the Student Handbook (Appendix 9). Hence, students have ready access to this information. Individual advising is required for many reasons, e.g. the importance of ensuring that students enroll in courses in a sequential manner, that is, that they complete the prerequisite courses for NFSC courses. Completion of prerequisites ensures that courses can be taught at the appropriate level.

***Criterion 4.6:*** *The program shall document that planned learning experiences provide for attainment of the expected competence described in the measurable goals for the program.*

NFSC faculty are dedicated to the timely attainment by students of the competencies described in the Standards and Education and the Foundation Knowledge and Skills for Didactic Component of Entry-Level Dietitian Education Programs. Program Goal 1, located in Criterion 1.2, and referenced in Criterion 4.2, states: "Ninety percent of the students who complete all the Program requirements will receive or have received a Bachelor's degree, and be eligible to receive a signed DPD Verification of Completion form." To assist in meeting this goal, the faculty wrote a policy on reporting of student progress that is included in the Student Handbook (Appendix 9). A part of the policy states that, "It is the joint responsibility of the student and his/her advisor to be aware if the student is at risk of achieving a GPA in the major or for CSUC cumulative coursework of less than 2.0; and is, therefore, in danger of not meeting university graduation requirements. In such instances, the advisor and student should develop a plan of action whereby the student has the opportunity to improve the GPA and, hence, avoid academic probation placement."

***Criterion 4.7:*** *NA to DPD*

***Criterion 4.8:*** *NA to DPD*

***Criterion 4.9:*** *The curriculum for all programs shall include learning opportunities for students to develop personal and professional attitudes and values, and leadership and decision-making skills relevant to practice.*

It is apparent from the NFSC alumni survey comments that faculty members have been very effective as role models and mentors, and that this represents a strength of the Program. A sampling of comments is located in Appendix 30. Considerable mentoring occurs during the advising sessions when faculty members have the opportunity to discuss students' progress in the major, interests in the attainment of specific pre-professional experiences, and their career goals.

In this setting, faculty members suggest additional course work or experiences to help students meet their unique aspirations.

Students in the DPD are required to take NFSC 229, Issues in Nutrition and Food Sciences. In this course, students are presented with a brief overview of ADA, legislative issues related to the profession, career opportunities in the field, and information about the application process for supervised practice programs, graduate schools, and employment. A discussion of professional ethics is a part of this class and students write a personal ethics statement. The ADA ethics statement also is made available to students in the Student Handbook (Appendix 9, pp. 20-22).

Many opportunities exist in the DPD curriculum for students to interact with professionals in the field and to develop personal and professional attitudes and values. Students in several courses do field observations and/or undertake laboratory experiences in settings where they co-act with professionals. Examples of these community settings include the WIC program, community health care clinics, food service establishments, congregate feeding sites, hospitals, and long-term care facilities. Students have the opportunity to interact with professionals who make class presentations and presentations to the NFSA. Students are also invited to meet with Advisory Committee members.

Following counsel by faculty members, many students have become affiliate members of ADA and attend the California Dietetic Association (CDA) Annual Meetings. In Spring 2000, approximately 10 undergraduate students attended the CDA Annual Meeting in Palm Springs. Five of these students presented poster papers. It is anticipated that more than 10 students will be attending the 2001 CDA Annual Meeting this coming March in Sacramento. Many students also attend the North Valley Dietetic Association meetings. This professional group is a sub-group of the Golden Empire District (GED) in Sacramento. For the past two years, approximately 15 students and the DPD Director traveled to Sacramento to attend the Career Faire sponsored by GED. A number of professionals speak to students as a part of the NFSC 229, Issues in Nutrition and Food Sciences course. Examples include a dietitian with the Air Force; a former Peace Corps volunteer in the field of nutrition; Dr. Katie Silliman, ADA and CDA legislative contact and grassroots liaison for state and federal political leaders; and a member of the State Department of Health and Human Services.

***Criterion 4.10:*** *The curriculum for all programs shall include experiences with other disciplines and exposure to a variety of settings, individuals, and groups.*

Students in the DPD at CSU, Chico have a uniquely extensive opportunity to interact with individuals in different majors across the campus. Sixty units, nearly one-half of the total number that is required to graduate, are General Education (GE) units. One important aspect of GE is described in the university catalog on page 125: "The GE program is designed to acquaint you with the variety of academic disciplines and to provide as broad an understanding as possible of your scientific, cultural, social, intellectual, and artistic heritage. GE balances the in-depth study of your major by strengthening basic skills and increasing your understanding and awareness of issues as aspirations of people throughout the world" (Appendix 3, p.39).

Students in the DPD program also take required courses in the departments of chemistry, biology, and psychology with students from these disciplines. Some students choose to obtain minors in these areas, or others, such as Spanish and business. Students are exposed to the broad scope of the biological sciences through the Department of Biological Sciences Friday afternoon seminars that feature speakers addressing topics inclusive of the area. A flyer advertising one of the seminars is located in Appendix 31.

## Standard Five

**Standard Five:** A systematic approach shall be used in managing and evaluating the program.

**Principle:** An educational program requires the application of sound management principles. Systematic and continuous internal and external evaluation provides necessary feedback to ensure that program goals continue to be appropriate and that goals are attained.

*Criterion 5.1: The sponsoring institution and/or program shall have policies that support effective program management.*

The primary accrediting body for California State University, Chico, is the Western Association of Schools and Colleges (WASC), one of six major regional accreditation agencies in the United States. A copy of a letter affirming the accreditation is located in Appendix 2. A copy of the catalog page showing associations that have accredited programs at CSU, Chico is located in Appendix 3, p.40.

The Memorandum of Understanding (MOU) and Collective Bargaining Agreement represent agreements between the faculty union and administration. These documents, in addition to the Faculty Personnel Policies and Procedures (FPPP) manual, address issues relating to appointment, review, dismissal, benefits, and evaluation, as well as many other subjects of importance in the administration of the university. These resources will be available for review on site.

*Criterion 5.2: The program shall be integrated within the administrative structure of the sponsoring institution.*

The DPD is part of the Nutrition and Food Sciences (NFSC) program. Since 1992, NFSC has been a part of the Department of Biological Sciences in the College of Natural Sciences. An abbreviated organizational chart is located in Appendix 32.

*Criterion 5.3: The responsibilities of the Didactic Program Director shall include the assessment, planning, implementation, and evaluation critical to an effective program. The Program Director shall have the authority to effectively manage the program.*

The Didactic Program Director, Faye Johnson, Ed.D, RD, has responsibility for the assessment, planning, implementation, and evaluation of the program, and has the requisite authority to conduct these duties. It is estimated that the position requires an average of five – seven hours of work per week throughout the academic year. Responsibilities of the Director are delineated in the following position description.

**Position Description**  
**Director, Didactic Program in Dietetics**  
**CSU, Chico**

1. Maintains communication with The American Dietetic Association, including annual reports, directory information updates, and other reports or information as requested.
2. Teaches NFSC 229, Issues in Nutrition and Food Sciences.
3. Communicates with students regularly regarding the ADA Standards of Education and Foundation Knowledge and Skills for Didactic Component of Entry-Level Dietitian Education Programs.
4. Revises policies and procedures as necessary.
5. Communicates with Advisory Committee and determines meeting dates and agendas.
6. Plans and maintains Master Programmatic Assessment Plan Schedule (Appendix 29).
7. Provides qualified students with DPD Verification of Completion form.
8. Ensures that the graduating senior exit survey assessment of the Program is conducted in NFSC 227 each semester.
9. Communicates with faculty members regarding relevant information from ADA.
10. Coordinates curriculum development to ensure that Standards of Education and Foundation Knowledge and Skills for Didactic Component of Entry-Level Dietitian Education Programs continue to be met.
11. Maintains records including placement of students in supervised practice programs and rate of students passing the RD examination.
12. Maintains currency of alumni mailing list.
13. Conducts program assessment studies as described in the master Programmatic Assessment Plan Schedule.

*Criterion 5.4: Administrators, faculty, students, and other appropriate constituencies shall participate in systematic planning, implementation, and evaluation of the program on a regular and continuing basis.*

Many individuals and groups contribute to the systematic planning, implementation, and evaluation of the program on a regular and continuing basis. The contributions of these groups are discussed as follows.

#### Advisory Committee

As noted in Criterion 3.2, the primary source of off-campus input to the program is the NFSC Advisory Committee. Appendix 18 contains agendas and minutes of meetings. The committee meets on a biennial basis. In 1998, the group reviewed the mission statement and goals of the program. They also made several suggestions regarding the survey instruments and stated the need to prepare students for a changing work environment. Many of their suggestions were incorporated into classroom information. In particular, the emphasis in the DPD curriculum on the use of technology in the classroom came, partially, from the Advisory Committee's input. The committee members noted the critical importance of students being able to use, or minimally, to be aware of various technological advances. As a result, many of the NFSC courses now incorporate technology into the classroom, in fact, it is identified as one of the program strengths in Criterion 4.4. Approximately six of the classes in the DPD curriculum use WebCT extensively, and nearly all the courses include the use of the Internet. Students in NFSC 226, Seminar in Medical Nutrition Therapy (MNT), develop a web page on a medical nutrition therapy topic. Many of these students develop their own personal web site as part of a 'webfolio' and link their MNT page to their personal web page. Professionally related software is utilized in many classes such as in the foodservice courses for menu writing and financial management. West Diet Analysis Plus, Food Processor, Nutritionist V, and Powerpoint are programs that the students learn to use in the various courses. NFSC 126, Clinical Nutrition, uses Compu-Cal hand held computers for nutrition assessment and the calculation of enteral nutrition formulas.

During the Fall 1999 Advisory Committee meeting the suggestion was made to include an alternative health practitioner on the committee. The faculty responded to this suggestion and recruited Ms. Janet Bailey, an alumna, certified hypnotherapist, and natural healer who accepted this role.

#### Students

Faculty members have many opportunities for numerous on-going contacts with students. These contacts may be formal, such as during advising sessions; or they may be informal, such as during laboratory sessions, discussions before or after classes, or during NFSA meetings. Student comments are given careful consideration. For example, students indicated a desire to have more knowledge about healthy food preparation practices. To meet this need, the NFSC 224, Cultural Foods' term project was modified to include an assignment reflecting more healthful food preparation practices. In addition, one laboratory session is devoted to modification of foods and recipes to reflect a health conscious approach to food preparation and presentation. Students also requested more hands-on opportunities for developing skills in

nutrition assessment and nutrition education. The offering of NFSC 126L, Nutrition Assessment Laboratory, and the provision of K-12 nutrition education internships have been effective responses to these requests.

Each spring semester, all faculty members on the CSU, Chico campus are evaluated by students. In addition to numerical data, such as means and standard deviations, signed, written comments become part of the faculty member's permanent file. Unsigned comments are given to the instructor and are not reviewed by administrators nor do they become part of the permanent records. A sample of the evaluation form is located in Appendix 33. Evaluations of NFSC faculty are available on site and may be accessed by request from the individual member.

Students also provide input to the Program through the completion of an exit survey. This survey, similar to the alumni survey, queries students about perceived knowledge of various topics and requests written comments regarding programmatic strengths and weaknesses. A sample of the survey is located in Appendix 34. The exit survey is administered each semester to graduating senior students in NFSC 227, Community Nutrition. Particular strengths as reported by students include knowledge of the nutrient composition of food and the principles of nutrition screening, assessment, planning, intervention, evaluation, and documentation. Written comments by students most frequently cited the NFSC faculty and the overall dietetics curriculum as programmatic strengths. Weakness, as reported by these graduating students, included presentation of information regarding laws, regulations and standards affecting dietetic practice; fundamentals of political and legislative process; and use of computers for data processing and information management. The low rating for the use of computers is due, in part, to the wording used in the statement of this competency. Students may not perceive that their use of computers to analyze the nutrient content of foods, present seminar information, evaluate web sites, create web pages, etc. is reflected in the wording of the statement on the survey which states, "knowledge relative to data processing and information management." Also, the dramatic increase in the use of computers in the NFSC curriculum is not reflected in the exit surveys completed prior to 1999.

### Alumni

Two NFSC alumni surveys were conducted since the last major self-study was written in 1988. Ideally, alumni are surveyed every five years. However, since the 1998 self-study date was changed to 2001 to accommodate the ADA change to an accreditation process rather than the previous approval process, the second survey was conducted in the summer of 2000. Results of the summer 2000 survey revealed that the mean of all 31 program parameters assessed was 4.1 on a 5 point Likert scale (5=strongly agree) indicating that alumni generally felt knowledgeable about the various competencies measured. The following competencies were identified as Program strengths based on a score of  $\geq 4.5$  on a 5 point Likert scale from our sample of 90 alumni responses.

1. Principles of effective oral and written communication
2. Principles of physiology, microbiology, and chemistry
3. Physiological, biochemical, and behavioral bases for nutrition intervention in health and disease

4. Influence of socioeconomic, cultural, and physiological factors on food and nutrition behavior
5. Nutrient needs for various stages of the life cycle
6. Food science and techniques of food preparation
7. Nutrient composition of food and appropriate sources of data

A programmatic weakness was indicated by a mean score of < 3.5 on a 5 point Likert scale (5=strongly agree) from this same sample of 90 alumni. Only 2 of the 31 competency areas addressed in the survey met this criteria. These were:

1. Principles of the political and legislative process, and
2. Principles of alternative nutrition and herbal therapies

Prior to this most recent survey (Summer 2000), alumni were surveyed in 1993 and asked to rate their knowledge regarding 24 areas in the practice of dietetics. The areas receiving the lowest mean scores for this 1993 survey were:

1. Fundamentals of human relations and group dynamics
2. Laws, regulations and standards affecting dietetic practice
3. Fundamentals and techniques of financial management
4. Fundamentals of marketing food and nutrition services
5. Fundamentals of political and legislative process

In response to the results from these two surveys, increased coverage of laws and the legislative process and alternative nutrition competencies is being implemented in NFSC 125 Human Nutrition, NFSC 225 Advanced Human Nutrition, NFSC 126 Clinical Nutrition, and NFSC 226 Medical Nutrition Therapy. Methods for addressing these competencies include www site presentations, case study write-ups, and product evaluation assignments. In addition, every spring Dr. Kathryn Silliman, a long-standing legislative liaison for the California Dietetic Association, takes a group of NFSC students to the annual Legislation Day in Sacramento sponsored by the California Dietetic Association. Coverage of this information has also been increased in the NFSC 229, Issues in Nutrition and Food Sciences, as has fundamentals of marketing food and nutrition services.

The listing of three management competencies as a weak programmatic area in the 1993 survey contributed to the deletion of Management, 149 and 231, the Management of Organizations and Human Resource Management (currently listed as Management 131), respectively, from the DPD required course list. These two courses were taught by School of Business faculty and were replaced with NFSC 160, Foodservice Administration. Conversations with students and examination of course materials indicated that the management courses were too wide-ranging and not applicable to foodservice management of the practice of dietetics. NFSC 160 directly relates to foodservice administration and dietetics, and the adoption of the book by Nancy Hudson, PhD, RD, entitled Management Practice in Dietetics contributes significantly to this focus. It is anticipated that the means on the above stated items will increase beginning with the 2001 graduating class. It is at this time that a majority of the students who took NFSC 160 rather than the Management classes will complete the exit survey.

## Administration

The Department of Biological Sciences and the College of Natural Sciences provide regular input to the Program, particularly in curriculum review. All programmatic changes, including changes to the core or option courses, must be approved by the department curriculum committee, the chair, the college curriculum committee, and the dean. Curriculum changes are formalized at two-year intervals to coincide with the publication of the university catalog. Every program at the university must be reviewed every five years. The Program was last reviewed in 1995 and will be reviewed during the 2000-2001 academic year. A copy of the 1995 review will be available for review on site.

## Faculty

The faculty members in the NFSC program are committed to the DPD Mission Statement and Program Goals. The consistent attainment of the overall program goals as well as the program management goals are the central focus of nearly all meetings and actions by the faculty. In the past two years, NFSC faculty began working on a plan to bolster the curriculum in Foodservice Administration and recruit students to this program. At this time, the Foodservice Administration option represents a small part of the NFSC program.

***Criterion 5.5:** Student progress shall be measured using a variety of strategies during and at the conclusion of the program to verify competencies.*

A review of the "Assessment Methods" in Appendices 22 and 23, indicate that a wide range of methods are used to assess student mastery of competencies covered in the various courses. These methods contribute to the final grade in the course. Each student is provided a course syllabus at the beginning of the semester. This document clearly delineates the assessment methods and the total number of points required for obtaining specific letter grades. Students are informed in a number of ways, such as during classes and NFSA meetings and advising sessions, as well as in the Student Handbook, about the importance of receiving high grades to be competitive for a supervised practice program placement. Additionally, they are informed that a minimum GPA of 2.0 is required to demonstrate achievement of the competencies and receive a DPD Verification of Completion form. Advisors have knowledge of students' GPA and counsel them if the GPA is low and in danger of dropping below a 2.0. Advisors can readily access students' transcripts and GPA information through the ASSIST program available on all faculty computers. As of fall semester, 2000, the average GPA for students in the DPD was 2.83, suggesting that CSU, Chico students are successfully meeting the competencies. Since GPA information is confidential, documentation of this statement will be available on site, by request, from the Program Director.

**Criterion 5.6:** *Outcome measures for program graduates shall be developed and evaluated for achievement of measurable goals. One outcome measure shall be the pass rate of first-time test takers on the Registration Examination. If the pass rate is less than 80% for first-time test takers, a plan of action for improvement shall be provided.*

#### Registered Dietitian Examination Passage Rate

Appendix 35 contains the Registration Examination for Dietitians Summary Reports for the five-year periods of 1990-1994 and 1995-1999. The passing rate for first-time test takers was 93 and 95 percent, respectively, for the 2 sets of years. This is well above the value at which ADA requires a plan of action for improvement to be instituted (80%) and above the NFSC passing rate goal (90%). Two of four first-time repeaters passed the examination during the 1995-1999 period, while four of the six repeaters received passing scores during the 1990-1994 period. Test score data reveal that the mean scores for CSU, Chico prepared graduates were either above the national mean or within the standard deviation.

#### Placement Rate for Program Graduates in Supervised Practice Programs

The Program at CSU, Chico shows an average placement rate for the past eight years of 69 percent (Appendix 36). This rate is based on the following information:

Year	# applicants	# placed	% placed*
1993	15	11	73
1994	16	10	63
1995	16	10	63
1996	18	14	78
1997	16	9	56
1998	10	7	70
1999	11	8	73
2000	14	11	79

\*Includes an average of 3 (NFSC undergraduate alumni) students per year accepted into the NFSC Dietetic Internship Program following completion of their graduate course work.

#### Results of Survey of Internship Directors and Employers

A survey of internship directors and employers was also conducted during Summer, 2000. Twelve employers and 13 internship directors responded to this survey. Although it is not possible to draw valid conclusions from the results of this small, self-selected sample, it appears that both internship directors and employers of our alumni are typically very pleased with the level of preparation of NFSC graduates. A summary of respondents' comments is provided in Appendix 37. The regular surveying of internship directors and employers is included in the NFSC Programmatic Assessment Plan (Appendix 29). It is expected that valuable information regarding the Program's strengths and weaknesses will be obtained from these professionals who have direct, first-hand knowledge of the students' educational preparation.

***Criterion 5.7:*** *Continuous program evaluation shall address achievement of measurable goals for the program. Data shall be analyzed to identify the extent to which measurable goals for the program are being achieved. Appropriate corrective action shall be taken when measurable goals for the program are not being achieved.*

This section contains an evaluation of the various goals that have guided and continue to guide the Program. These include evaluation of:

- Program Goals, stated in Criterion 1.2, developed by the faculty in 1997 and refined in 2000.
- Program Goals, stated in the Five-year Interim Report submitted to ADA, March, 1994, and developed by faculty members in 1993.
- Program Management Goals developed by the NFSC faculty in 1997.

#### Achievement of the Program Goals Listed in Criterion 1.2

When writing the Self-Study, it became apparent that several goals written in 1997 were not measurable and that many related to the management of the Program. In 2000, faculty members approved the refined Program Goals that are stated in Criterion 1.2 and which are also shown below.

1. Ninety percent or more of students who complete all General Dietetics option requirements will receive a Bachelor's degree, and by virtue of achieving a minimum GPA of 2.0 be eligible to receive a signed DPD Verification of Completion form.

This goal is met. Faculty advisors report that 90 percent or more of their advisees have a GPA in DPD courses of 2.0 or greater.

2. Ninety percent or more of graduates who complete a Supervised Practice Program will indicate that they were well prepared by the NFSC program.

This goal is met. A mean score of 4.0 on a 5 point Likert scale (5=strongly agree) for 31 competencies indicates that NFSC graduates perceive themselves to be well prepared by the NFSC program. Internship directors who responded to the Summer, 2000 survey also indicated that students were well prepared for the experience. These results are discussed in Criterion 5.6.

3. Ninety percent or more of graduates who complete a Supervised Practice Program will receive a passing score on the Registration Examination for Dietitians.

This goal is met. Ninety-five percent of the CSU, Chico graduates who sat for the Registration Examination for Dietitians between 1995-1999 and 93 percent of first-time test participants between 1990-1994 received passing scores. These results are discussed in Criterion 5.6.

4. Eighty percent or more of graduates who complete the General Dietetics option, but who do not participate in a Supervised Practice Program, will indicate that they are well prepared for their first career-related position following college graduation.

This criterion is met. A mean score of 4.1 on a 5 point Likert scale (5=strongly agree) for 31 competencies indicates that NFSC graduates who did not participate in a Supervised Practice Program perceive themselves to be well prepared by the NFSC program for their first career-related position.

5. Seventy percent or more of graduates will be employed in positions that require career-related knowledge gained in their undergraduate program unless they choose to not be so employed.

Alumni survey results indicate that this goal is met for the 90 respondents. It is recognized, however, that this group of respondents is a self-selected sample and that those alumni employed in the NFSC discipline may be more likely to respond to the survey.

#### Achievement of Program Goals Stated in 5-Year Interim Report, March, 1994

Following are the four program goals as presented in the 5-year Interim Report.

1. Improve students' preparation in science.
  - a. Require Chem 001A, General Chemistry, and 001B, General Chemistry, (renumbered to Chem 037 and 038, respectively) instead of Chem 051, Chemistry for Applied Sciences I (renumbered to Chem 027).
  - b. Require Biol 006, a course in the biology of the cell, as a prerequisite to NFSC 125, Human Nutrition.
  - c. Recommend a minor in Chemistry to NFSC dietetics option students.

This goal was partially met.

Item a: The faculty recommend that students take Chem 037 and 038, the courses taken by the Chemistry majors, especially for students who desire to work in research or attend graduate school in a Nutritional Science program. Most of our CSUC students desire, instead, to work in the community or education settings for which the Chem 027 course is sufficient.

Item b: It was not feasible to require Biol 006 for two reasons. First, many students transfer from community colleges and have not taken a course similar to Biol 006. Therefore, this requirement would result in the individual waiting an additional semester while completing Biol 006 before taking NFSC 125, Human Nutrition, the first of the nutrition courses in the DPD curriculum. Second, the DPD is already a high unit major; 128 units are specified in the 1999-2001 catalog for a degree in NFSC. Adding the Biol 006 course to the curriculum would have increased the number of required units during the same time period in which the California legislature approved a decrease in units for graduation from a CSUC campus from 124 to 120 units. The California State University system is under pressure from the public to plan

curriculum such that completion of graduation requirements within a four-year time period is a realistic goal.

Item c: We continue to recommend that students minor in Chemistry, particularly if they intend to attend graduate school.

2. Facilitate student preparation for post-baccalaureate training and careers in the discipline.
  - a. Require all students to enroll in NFSC 229, Futures in Dietetics and Food Administration (re-named to Issues in Nutrition and Food Sciences).
  - b. Require academic advising for all students every semester.
  - c. Encourage volunteer work and paid work experience in as many aspects of dietetics as possible.
  - d. Encourage membership in the Student Dietetic Association (renamed to Nutrition and Food Sciences Association) as well as student membership in the North Valley Dietetic Association, the Golden Empire District, and the American Dietetic Association.

This goal was met.

Item a: All students are required to take NFSC 229, Issues in Nutrition and Food Sciences. This course is taught by the DPD Director and prepares students for their roles as new professionals. Course syllabus is available on site for review.

Item b: All students are required to participate in advising every semester. Students indicate that they value this time with their advisor and eagerly participate in the process. It is beneficial to the student, and also allows the advisor to learn more about the student and, therefore, be able to provide more relevant career-related information and letters of recommendation.

Item c. All faculty members encourage career-related work experiences during class discussions and advising sessions. Opportunities for these experiences are announced in classes, posted on bulletin boards, and announced at NFSA meetings. Additionally, the value of work experience is emphasized in the Student Handbook (Appendix 9, p. 12-14). Students may receive academic credit by enrolling in NFSC 289, Internship, and completing the Undergraduate Internship Packet.

Item d. All faculty members encourage these memberships. Examples of the successful achievement of this goal is that approximately 50 percent of the NFSC program students are active members of NFSA and, in 1999, approximately 10 students in the DPD attended the California Dietetic Association meeting in Palm Springs.

3. Improve management theory education.
  - a. Continue requirement for Management 149, Theory of Management.
  - b. Continue requirement for Management 231, Human Resource Management (re-numbered to Management 131).
  - c. Continue to require that both Management 149 and 231 be prerequisites for NFSC 261, Foodservice Procurement and Management.

This goal was partially met.

Items a and b: Through a review of student comments and the syllabi for the two courses, it became apparent that these courses were not meeting the educational needs of our students. Therefore, NFSC 160, Foodservice Administration began to be taught in 1999 with a focus on improving the students' management theory education. This curriculum change has enabled the successful achievement of our programmatic goal of improving management theory education.

Item c: The current catalog shows Management 149 as a prerequisite for NFSC 261; however, the 2001-2003 catalog will show NFSC 160 as a prerequisite.

4. Incorporate computer and electronic technology as it becomes available.
  - a. Continue development of computer applications in foodservice administration classes
  - b. Utilize electronic products and equipment in conjunction with course work
  - c. Continue anticipation of a nutritional sciences laboratory

This goal has been met. The incorporation of technology into NFSC coursework is addressed has been achieved in a variety of classes as evidenced in Appendices 22 or 23.

Items a and b: A computer software package, Master Cook: The Complete Suite, is used to develop menus, expand recipes, create purchasing lists, execute pricing functions, and conduct nutrient analyses. Nutrient analyses are performed using a variety of programs including West Diet Analysis Plus, Food Processor, and Nutritionist V. Students in NFSC 126, 126L, and 226 are required to demonstrate effective use of the internet for course related information searches. In addition, students in 226 are required to develop a medical nutrition therapy topic web page and use Powerpoint in the presentation of a case study.

Item c: NFSC 126L, Nutrition Assessment Laboratory is a reality. Discussion regarding the use of technology for this course is addressed in Criterion 3.1.

#### Achievement of Program Management Goals developed in 1997

Below is a discussion of the seven program goals developed in 1997.

1. Present a broad-based and challenging curriculum that integrates foundation knowledge, application skills, and competencies for the didactic component of entry-level dietetic education in an exemplary program.

This goal is met. During the preparation of this self-study, this goal was refined and became the basis for the NFSC Program Goals. Achievement of this goal was discussed earlier in this Criterion.

2. Create opportunities for students to acquire real-life, pre-practice experiences, and to interact with dietetic professionals, including faculty, as a means of encouraging development of professional attitudes relevant to dietetics practice.

This goal is met. It is a re-affirmation of Goal 2 in the Achievement of Program Management Goals Stated in 5-Year Interim Report, March, 1994 section of this report. Further, it is addressed in Criterion 4.9.

3. Develop communication, problem solving, computer and presentation technology, and critical thinking skills.

This goal is met. It is a re-affirmation of parts a and b of Goal 4 in the Achievement of Program Management Goals Stated in the 5-Year Interim Report, March, 1994 section of this report. It is also addressed in Criterion 4.4.

4. Instill the value of lifelong learning so as to encourage program graduates to progress from beginner level, to mastery of the discipline, to proficiency, and finally, to the level of expert in the area of dietetic practice.

This goal is met. It is a re-affirmation of Goal 2 in the Achievement of Program Management Goals Stated in the 5-Year Interim Report, March, 1994 section of this report. Further, it is addressed in Criterion 4.9. In addition, the DPD Program at CSU, Chico places strong emphasis on the use of technology, an area that will continue to grow in importance for dietitians. New methods of nutrition assessment are being taught in NFSC 126, Clinical Nutrition and NFSC 126L, Nutrition Assessment Laboratory. These include the various assessments that can be made with the use of hand held computers from anthropometry to the calculation of enteral nutrition formulas. Problem solving and critical thinking skills are components of all NFSC courses as described in Criterion 4.4.

5. Provide academic and career-related advising for application to supervised practice programs, graduate schools, or employment.

This goal is met. It is a re-affirmation of Goal 2 in the Achievement of Program Management Goals Stated in the 5-Year Interim Report, March, 1994 section of this report. Topics included in this goal are important parts of advising and the NFSC 229, Issues in Nutrition and Food Sciences course. The Student Handbook contains information relevant to this goal, as well.

6. Guide students on the importance of flexibility in selecting career path opportunities in recognition of the many facets of the profession currently and in the future.

This goal is met. It is also a re-affirmation of Goal 2 in the Achievement of Program Management Goals Stated in the 5-Year Interim Report, March, 1994 section of this report. Topics included in this goal are also important components of student advising and the NFSC 229, Issues in Nutrition and Food Sciences course.

7. Continually measure student outcomes with regard to both in-class and out-of-class educational settings, as well as track placement of program graduates to improve efficiency and effectiveness of resource utilization.

This goal is met. The means by which it is met are specified in Criteria 5.5 and 5.6. The development of the NFSC master schedule for our programmatic assessment plan will facilitate the process of measuring student outcomes.

***Criterion 5.8:*** *Short- and long-term plans for management of the program shall be delineated based on evaluation of the program.*

The NFSC faculty, in conjunction with the Advisory Board and NFSA students, have identified three areas for the development and/or refinement of management plans.

## 1. Recruitment

Recruitment efforts will be expanded in an effort to increase the number of majors from the low of 68 in 1999 to our 1993-1996 enrollment of approximately 100 dietetics majors. Recruitment efforts include the following:

Short-term and On-going Goals:

- a. Maintain a bulletin board in a high traffic area displaying copies of dietetics related information available for removal by interested students
- b. Participation in the tasting and evaluation of NFSC 120 Food Sciences Lab products is periodically opened to the general campus community. Interested students can follow their noses as well as posted signs directing them to the foods lab to participate in product tasting and evaluation.
- c. Participation in the Annual CSUC Fall Application Day for incoming freshmen and transfer students. Prior to Fall 2000, the NFSC program had not participated in this event.
- d. Recent curriculum modifications in the minors for Nutrition and Foodservice Administration have resulted in an increase in the number of minors, some of whom decide to change their major to the dietetics option in the NFSC major. Faculty will continue with curriculum modification efforts to meet the needs of nutrition minors.

Long-term Goal:

- a. Establishment of partnerships with local high schools, particularly Pleasant Valley High School. This high school has a highly enrolled Home Economics, Nutritional Science, and Food Science course of study. The coordinator, Priscilla Burns, is an active member of the NFSC Advisory Committee and has partnered with NFSC faculty on several nutrition education grant proposals.

## 2. Increase in Student Diversity

Goals and activities for increasing ethnic and gender diversity among NFSC students from the current 90% female:10% male ratio and ethnic composition of 85% Caucasian and 15% Hispanic include the following:

Short-term and On-going Goals:

- a. Promotion of the job opportunities in foodservice administration. NFSC Advisory Board members stated that the promotion of this career path would serve to attract more male, African American, and Hispanic students into the program.
- b. Presentations of nutrition and food science related topics that are open to all CSUC students. The CSUC Wellness Center and a variety of other CSUC groups sponsor presentations. This past semester, Fall 2000, two NFSC faculty gave public presentations drawing a combined total of 200 students.
- c. Continue sponsoring the annual World Food Day Teleconference event each fall. This 3-hour event draws ethnically and culturally diverse participants.
- d. Target recruitment efforts to ethnic minority and male students in the NFSC 25 Basic Nutrition and NFSC 123 Nutrition and Physical Fitness courses. Approximately 400 students enroll in these courses each semester.

Long-term Goal:

- a. Establish NFSC scholarships targeted, within legal specifications, at high school and community college students to encourage their pursuit of a degree in dietetics.

### 3. Outcomes Research

Outcomes research activities will include the following:

Short-term Goals:

- a. Revise the student exit survey and the alumni survey to reflect changes in the NFSC curriculum.
- b. Insure that students complete the survey during their final semester in the NFSC program.

Long-term Goal:

- a. Revise the employer and internship director surveys to reflect changes in the NFSC curriculum.

## SUMMARY

The *strengths* of the Nutrition and Food Sciences Program can be divided into four areas: students, faculty, curriculum, and community.

### Students

1. Approximately one-half of NFSC graduates apply for dietetic internships, the majority of whom complete the career path to become a registered dietitian.
2. Students completing the NFSC program are well prepared as evidenced by:
  - a dietetic internship acceptance rate (69%) that is higher than the national average
  - a passing rate on the Registration Exam for Dietitians (94% over the past 10 years) that is higher than the national average,
  - high rates of acceptance into graduate programs and employment in the field of nutrition and food sciences.
3. Students are involved in a variety of community organizations, such as the American Heart Association and the American Cancer Society. Many work in nutrition related jobs while attending school.
4. Many students are members, attend meetings, and are active in the North Valley Dietetic Association, the California Dietetic Association, the American Dietetic Association, and other professional organizations.
5. There is an active Student Nutrition and Food Sciences Association.
6. Approximately 20% of NFSC majors are minority students, predominantly Hispanics. This rate is reflective of the CSUC student body.

### Faculty

1. The Program's faculty members have varied backgrounds and experiences and are capable of teaching a variety of courses.
2. The faculty's varied backgrounds contribute to a wide variety of undergraduate internships and job sites being available to students.
3. The faculty is active professionally; they conduct research, write publications, present conference papers, make public presentations, and assume leadership roles in professional organizations.
4. Faculty members are actively involved in a variety of professionally related community organizations.

5. Faculty members have a mentoring relationship with their advisees and meet with advisees at least once each semester. Probationary and academically disqualified students are tracked and advised.
6. Faculty members have excellent working relationships with fellow NFSC faculty, non-NFSC program faculty in the Department of Biological Sciences, and faculty in the College of Natural Sciences.

### **Curriculum**

1. The university requires a strong general education (60 semester units) background for all students.
2. The NFSC Program offers a Masters degree in Nutritional Sciences and an ADA accredited Dietetic Internship for students.
3. The university offers over 62 degree programs, many of which offer minors. Students are encouraged to complete a relevant minor.
4. The campus houses several computer laboratories and computer projects are incorporated into course content.
5. Students are encouraged to participate in undergraduate internships and obtain professionally related job experience.

### **Community**

1. California State University, Chico is located in a rapidly growing metropolitan area with a burgeoning number of positions open to NFSC graduates.
2. Many graduates have remained in the immediate geographical area resulting in an extensive professional network. The Program maintains alumni files and publishes an alumni newsletter annually.
3. The Program maintains a job board to publicize employment opportunities available in the community.
4. The Program receives ongoing private support from our *Circle of Friends*. Our *Circle of Friends* contributions help to fund the purchase of equipment and support student research presentations at major dietetic conferences in the community and throughout the state.

The *limitations* of the Nutrition and Food Sciences Program are:

1. Faculty members typically have heavy teaching, advising, and committee responsibilities.
2. There are limited funds for professional travel and teaching assistance.
3. Distance from major metropolitan centers makes it difficult for faculty and students to be active in organizations and events held in these locations.

The Nutrition and Food Sciences Program will use, or already has used, the DPD Self-Study Report and/or its findings to:

1. Be a guide for curriculum evaluation and modification.
2. Evaluate adequacy of preparation of students/alumni, using input from their employers or supervisors (internship directors, employers).
3. Communicate program accomplishments to students, faculty and staff, campus administrators, NFSC Advisory Board members, and alumni.
4. Incorporate Self-Study Report findings into the Program's Five Year Program Plan/Review to be submitted to the University.
5. Educate current and new campus administrators about the Program.