

Program Request for Nutrition Minor

Division of Foods and Nutrition
College of Health
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SECTION I

The Request

This proposal requests to establish an Undergraduate Minor in Nutrition offered by the Division of Foods and Nutrition. The proposed Minor will offer undergraduate students focused training in the field of Nutrition and related topics of health promotion/disease prevention. Currently there is a growing student interest in nutrition; however, there is no undergraduate program offered at the University to meet this need. This proposed Nutrition Minor would take advantage of faculty and coursework infrastructure already in place to meet the needs of student interested in this field. The Nutrition Minor would also serve as an ideal complement to existing B.S. programs in Exercise Sports Science and Health Promotion and Education.

The impetus for this proposal is predominantly student driven. The Division of Foods and Nutrition offers a wide range of undergraduate nutrition courses covering topics ranging from general nutrition, nutrition and health, weight loss, and sports nutrition to name a few. Many students take these courses and wish to pursue their training in nutrition only to find that there is no formal program in place to support them. These students often pursue other nutrition courses on their own and seek out advice of our faculty on course selection and career goals in spite of the lack of formal university recognition. By offering a Nutrition Minor, we can reward these students with formal recognition on their college transcript for specialized training apart from their chosen major field. Our vision in the Division of Foods and Nutrition is for a stand alone minor to fulfill this need that takes advantage of current courses that we offer. Therefore, this proposal should not be interpreted as a “stepping stone” toward a major degree in nutrition.

SECTION II

Complete Program Description

Nutrition is an interdisciplinary branch of science that examines the biological role of food and nutrients in health and disease. The Minor in Nutrition offers the opportunity for undergraduate students in any discipline to engage in a program of study designed to teach the fundamentals of nutrition. Students interested in this program must successfully complete BIOL 1000 (or equivalent) and apply for the program to the Division of Foods and Nutrition. The Nutrition Minor requires a minimum of 16 credit hours with FDNU 1020 and FDNU 3010 as required courses and at least 9 additional credit hours of electives selected from courses offered in the Division.

Purpose Of The Degree

This program offers a structured framework in which a student can receive training in nutrition though a prescribed course of study. This degree will complement existing fields of study such as health, exercise, preventive medicine, and allied health professions of nursing, pharmacy, occupational, and physical therapy. Students in these fields of study can use the Nutrition Minor to expand their marketability in relation to their career goals. The Nutrition Minor will also rectify the current situation in which

students are taking the courses fulfilling a Minor program, but are not receiving official recognition for it.

Admission Requirements

Students are required to be in good standing with the university as evidenced by official transcripts and to have successfully completed BIOL 1000 (General Biology) or AP biology in high school with at least a “C” grade (2.0 on 4.0 scale). BIOL 1000 is required for admission and will also serve as a part of the Nutrition minor curriculum as detailed in Appendix A. Students meeting this criteria will register with the Division of Foods and Nutrition and declare their intent to pursue a nutrition minor. Registration will consist of name, contact information, expected date of graduation, declared major, and student ID. Students will be allowed to enroll concurrently in BIOL 1000 and FDNU 1020 and will be officially accepted into the program after successful completion of both classes. Retention and completion in the program is based upon a minimum 2.0 GPA in all courses taken.

Student Advisement

Advisement will take place through group advisement sessions once per semester and through individual meetings as needed. Graduate students assigned as General Teaching Assistants in the Division of Foods & Nutrition shall also serve as assistant advisors to help with group and individual advisement sessions. Our current undergraduate advisor, Jean Zancanella, M.S., R.D., will be assisted by a panel of faculty and adjunct faculty members as detailed in Appendix C.

Justification For Number Of Credits

No justification needed, requirements follow those in USHE Policy R410.

External Review and Accreditation

No external consultants were involved in the development of this program. No professional accreditation is required for this program. The primary goal of this program is to provide a framework of general nutrition education, not to prepare students for professional counseling or clinical work. Our Division does currently offer an accredited nutrition graduate program in clinical dietetics and is officially accredited by the American Dietetic Association for the M.S. degree.

Projected Enrollment

Surveys were done during Spring Semester 2001 in FDNU 1020 sections to estimate student interest in a Nutrition Minor. Based on these results we estimate that the program would enroll 5-10 students/year during the first two years and 10-15 students/year in following years as the availability of the program becomes more well known.

Expansion of Existing Program

The Nutrition Minor is not an expansion of any existing program.

Faculty

No additional faculty will be required; current faculty, materials and facilities can absorb the additional student load.

Staff

No additional staff will be required; current staff can meet the needs of the additional student load.

Library

The University of Utah's Marriott and Eccles Health Sciences libraries currently have all materials required to offer a superior program as described in this proposal.

Learning Resources

No additional learning resources are required to support this program.

SECTION III

Program Necessity

Even though there is a growing interest in nutrition by students attending the University of Utah, there is no formal undergraduate program offered in this field. The Nutrition Minor would meet the needs of students interested in nutrition as a field of study and compliment several existing majors within the University of Utah such as Health Promotion, Biology, Exercise & Sports Science, and Nursing to name a few.

Labor Market Demand

There is no data on what types of jobs graduates from similar programs have obtained for the main reason that there are few Nutrition Minor programs established within USHE. Programs that are related to our proposed Nutrition Minor are summarized in the "Similar Programs" section below. However, by providing a formal Nutrition Minor program, the University would be offering the students an additional skill identifier that may make them more attractive to employers. The Nutrition Minor program also may serve as a feeder for the existing graduate programs in the Division of Foods and Nutrition by exposing potential students to a variety of nutrition courses.

We believe that students preparing for a wide variety of careers would benefit from the general nutrition education provided by this proposed minor. Among those careers possibly benefiting from a nutrition minor would be food sales (wholesale and culinary), food service managers, marketing professionals with supplement or food companies, science and health journalists, allied health professionals, physicians, dentists, primary school teachers in biological and social sciences, athletic trainers, coaches, hospice and long term care providers.

Student Demand

There is a growing body of evidence of student interest in a Nutrition Minor. When two groups of undergraduate nutrition students, totaling 350, were informally polled in class during Spring of 2001 and Fall of 2001, approximately 20% of each group indicated they would be interested in completing a nutrition minor. In addition, there has

been a steady stream of students approaching the undergraduate nutrition class instructors about such a program during every academic year.

Other internal data also support the strong student interest in nutrition. Our records indicate average of 5234 student credit hours (SCH) per academic year in our undergraduate level courses, all without benefit of offering a minor or major. Taken together, the surveys and our SCH records indicate significant student interest in nutrition and a nutrition minor program.

Similar Programs

Nutrition Minor programs are rare in the state of Utah, however there are several related programs within the USHE. Utah State University offers a B.S. in Food Science, Nutrition Science, and Dietetics, but no minor degree. Weber State University has two programs; a B.S. in Integrated Studies which contains an 18 hour nutrition component, and a stand alone Nutrition Education Minor. Southern Utah University offers a B.S. degree in Family and Consumer Sciences with an emphasis in Nutrition, and a separate Nutrition Minor degree. The impact on institutions within USHE would be minimal, if felt at all. A Nutrition Minor program established at the University of Utah would not affect the enrollment at other institutions. It should also be noted that this program is specifically for current University of Utah students and would not be in direct competition for students in other programs at other USHE institutions.

A comparison of our proposed minor to other established nutrition minors around the state of Utah and the country indicates similarity in core requirements and acceptable diversity in elective choices compared to other programs. We feel that this is a positive comparison since it indicates that we are structuring our program based on core nutrition educational concepts that are recognized and accepted around the country while still providing electives that are not commonly found in other programs. For sake of comparison, an outline of 4 other minor programs is shown below.

Weber State University, Ogden, UT

Nutrition Education Minor, 18 credit hours required.

Required Core Courses

Nutrition LS1020: Foundations in Nutrition (3 credits)

Nutrition 2320: Food Values, Diet Design & Health (3 credits)

Nutrition DV3420: Multicultural Health & Nutrition (3 credits)

Nutrition 4320: Current Issues in Nutrition (2 credits)

Elective Courses Select 7 credit hours from the following:

Nutrition 2220: Prenatal & Infant Nutrition (2 credits)

Nutrition 2420: Childhood & Adolescent Nutrition (2 credits)

Nutrition 3020: Nutrition & Fitness (3 credits)

Nutrition 3220: Foundations in Diet Therapy (2 credits)

Nutrition 4220: Sports Nutrition (3 credits)

Nutrition 4420: Health & Nutrition in the Older Adult (3 credits)

Health 3200: Methods in Health Education (3 credits)

University of Nebraska at Kearney, Kearney, NE

Nutrition Minor, 20 credit hours required. All courses are required as listed

- FCSC 110GS: Introduction to Nutrition (3 credits)
- FCSC 220: Food Preparation - (3 credits)
- FCSC 315: Cultural Perspectives in Food & Nutrition - (3 credits)
- FCSC 335: Nutrition Throughout the Life Cycle – (4 credits)
- FCSC 420: Community Nutrition - (3 credits)
- FCSC 451: Seminar in Nutrition and Dietetics – (1 credits)
- CSP 417: Counseling Skills - (3 credits)

University of California, Davis, CA,

Nutrition and Food Minor, 24 credit hours required.

Required Courses: 20 credits

- NUT 101: Introduction to Nutrition and Metabolism (5 credits)
- NUT 111: Human Nutrition (4 credits)
- FST 100A: Food Chemistry (3 credits)
- FST 100B: Food Properties (3 credits)
- NPB 101: Systemic Physiology (5 credits)

Electives: 4 credits chosen from the following

- NUT 120A: Nutritional Anthropology (4 credits)
- NUT 120B: Nutritional Geography (4 credits)

Case Western Reserve University, Cleveland, OH

Nutrition Minor: 15 - 18 credit hours required

- NTRN 201: Basic Nutrition (3 credits)
- NTRN 343: Dietary Patterns in the United States (3 credits)
- Nutrition electives: selected with the guidance of an advisor. (9 – 12 credits)

Benefits

The University of Utah and the USHE benefit by offering a Nutrition Minor program because it fulfills the need of the student, the ultimate customer. When students have options such as this open to them they will be more likely to stay on track in the University of Utah system.

Consistency with Institutional Mission

The proposed Nutrition Minor program is consistent with and appropriate to the University of Utah mission toward undergraduate and graduate education, research and scholarship. This undergraduate program will provide high quality academic, professional and applied learning opportunities designed to advance the intellectual, cultural and economic well-being of the students who enroll in it. In doing so the Nutrition Minor will be consistent with the institutional mission of the university.

Section IV

Program Assessment

The quality of the program will be assessed by surveying recent graduates that have been out of the program for at least 1 year. These students will be asked to complete questionnaires to assess several points: the quality of basic nutrition knowledge provided, the degree to which the Nutrition Minor has helped in securing employment in the graduate's field, and if completing the program has helped meet their personal or career goals. In order to relieve the potential workload on faculty and simultaneously provide graduate student training, we plan to use graduate student to analyze questionnaire data and assess program quality. This analysis can be used as part of a M.S. degree thesis for our graduate students interested in nutrition education outcomes. Based on results of these surveys from students who have completed the nutrition minor, we can modify the program as needed.

Expected Standards of Performance

At the time of graduation, students will have basic knowledge of biological sciences as they relate to human metabolism, nutrients and chronic disease. A grade of 2.0 or higher in required in each program courses will assure that basic knowledge in these areas have been achieved.

Student Assessment

A minimum grade of 2.0 in each program course on the 4 point scale will be an adequate measure of competency.

Continued Quality Improvement

At the end of each semester, student course evaluations will be collected and analyzed in order to make adjustments to course content and instruction. In addition, the monitoring of graduate student progress and success, focusing on those students who completed the Minor program in Nutrition, will provide additional information regarding the adequacy of training and preparation.

SECTION V

Budget

Salaries and Wages –N/A
Benefits-- N/A
Current Expense--none
Library--none
Equipment--none
Travel--none
TOTAL -- zero

Funding Sources

No additional funds will be required to develop and administer the Minor Program in Nutrition, as current staff, materials and facilities can absorb the additional student load. Courses required for the Minor program are currently offered and in place. Furthermore, many of students who will enroll in the Nutrition Minor would take the courses described in Appendix A whether the Minor were in place or not.

Reallocation

The reallocation of funds is not needed for Program implementation

Impact on Existing Budgets

We do not anticipate that other programs offered by the Division of Foods and Nutrition will be impacted by a Minor program in Nutrition. It is possible that if there are 10-20 students per year taking undergraduate nutrition courses in fulfillment of the minor, then we may increase our budget based on increased student credit hours (SCH). However, we are not relying on these funds, nor do we currently require them for our proposed Minor.

APPENDIX A

New Courses to be Added in the Next Five Years

No new anticipated to be developed within the next five years.

All Program Courses

The required pre-requisite for enrolling in the Nutrition minor is BIOL 1000 or equivalent as detailed in “Section II; Admissions requirements”. A minimum of 20 hours are required for the Minor; 4 hours pre-requisite in BIOL 1000 or equivalent, 7 hours in core courses and a minimum of 9 hours in elective courses. At least 6 credit hours of electives must be from upper division courses defined as 3000 level and above.

Total credits hours required for Nutrition Minor: 20 semester hours

<u>Course Number</u>	<u>Title</u>	<u>Credit hours</u>
<i>Pre-requisite Course</i>		
BIOL 1000	<u>General Biology</u>	<u>4</u>
Biology as a modern science stressing organization, genetic control, physiology, evolution, development, ecological interrelationships, and behavior.		
<i>Core Courses</i>		
FDNU 1020	<u>Scientific Foundations of Nutrition</u>	<u>3</u>
Basic nutrition concepts and their relationship to current nutrition problems. Fundamentals of nutrients, deficiency, toxicity, requirements, health, and maternal & infant nutrition are taught. Current issues of diet and lifestyle in relation to disease are discussed.		

FDNU 3010	<u>Nutrition Intervention in the Treatment of Chronic Disease</u>	4
Nutritional biochemistry and cellular homeostasis are integrated with nutrition intervention in the prevention and treatment of chronic disease.		
<i>Electives (select minimum of 9 credit hours)</i>		
FDNU 1620	<u>Cultural Aspects of Food</u>	3
The application and understanding of social, religious, economic, and aesthetic qualities of foods provides the knowledge for the explorations of food patterns of various cultures.		
FDNU 2440	<u>Advanced Nutrition Science</u>	4
Advanced study of macro and micronutrients and their relationship to disease states (heart disease, cancer, diabetes, hypertension, osteoporosis). Physiological and metabolic basis of nutrient needs during the life cycle with clinical examples are also discussed.		
FDNU 3320	<u>Performance Nutrition for Coaches and Athletes</u>	3
The role of food and nutrients in exercise and human performance. Specific dietary recommendations for training, competition, and basic dietary guidelines for a healthy foundation for physical fitness.		
FDNU 5380	<u>Understanding Dietary Supplements</u>	3
An overview on the types and potential applications of dietary supplements. Issues regarding efficacy, regulation, basis of biological function and evaluation of claims are examined.		
FDNU 3850-002	<u>Build a Better Body Through Nutrition</u>	3
The role of good nutrition as a part of healthy lifestyle to improve fitness, increase health and reduce risk of chronic disease.		
FDNU 3420	<u>Applied Nutrition Through the Life Cycle</u>	3
Nutritional requirements and practical applications in the life cycle. Nutrition assessment, chronic disease, and body composition through the life cycle are also addressed.		
FDNU 3350	<u>Selected Topics</u>	1-5
Special projects designed to meet a particular interest. Project is designed and coordinated between individual faculty members and enrolled students with prior permission and arrangement. Projects can include scholarly investigation and written report(s) on a special nutrition topic, or laboratory based research culminating in a written report(s).		

FDNU 5320 Nutrition and Sports Performance 3
Metabolism of nutrients and nutritional needs for optimal human performance. Specific recommendations for training and competition, and basic dietary guidelines. In depth discussions on current research regarding supplements and ergogenic aids.

FDNU 5340 Nutrition and Women's Health 3
Nutritional needs of women throughout the life cycle with special emphasis on pregnancy, lactation, infancy, and aspects of female body image expectations as dictated by sex roles. Personal examinations of eating styles in relation to health, fitness, and family interactions.

FDNU 5350 Eating Disorders: Prevention and Treatment 3
Examination of eating disorders focusing on current prevention programs and research.

Special Permission Courses: In cases where a student has the required biology, chemistry, physiology, and nutrition background, special permission may be obtained by the instructor to take the graduate courses listed below. In the past, a limited number of advanced undergraduates with the appropriate background have taken these courses and done well.

FDNU 6440 Macronutrient Metabolism (permission required) 4
In depth examination of energy, carbohydrates, lipids, proteins in human nutrition as it relates to health and disease. Students are expected to apply knowledge to evaluate the scientific literature and popular books on nutrition topics.

FDNU 6446 Micronutrient Metabolism (permission required) 4
In depth examination of the biological role of vitamins and minerals in human nutrition as it relates to health and disease. Students are expected to apply knowledge to evaluate the scientific literature and make presentations on special topics of interest.

APPENDIX B

Program Schedule

Coursework listed in Appendix A may begin at any time prior to graduation with a Bachelor's Degree beginning with BIOL 1000. It is strongly recommended that the core courses (FDNU 1020, 3010) be completed before any electives are taken.

APPENDIX C

Faculty To Be Used In Support Of Program

Full Time

E. Wayne Askew, Ph.D., Director, Division of Foods & Nutrition, FDNU 5320 Instructor
Thunder Jalili, Ph.D., Undergraduate Honors Advisor, FDNU 1020 Instructor

Joe Carlson, Ph.D., R.D, Co-Instructor FDNU 5320

Jean Zancanella, M.S., R.D., Undergraduate Advisor

Adjunct Faculty

Carolyn Hollingshead, Ph.D., R.D. Adjunct Faculty, FDNU 1620 Instructor

Joan Benson, M.S., R.D., Adjunct Faculty, FDNU 1020 Instructor

Staci Nix, M.S., R.D., Adjunct Faculty, FDNU 3010 Instructor

Amy Reeder, M.S., R.D., Adjunct Faculty, FDNU 1020 Instructor

Beverly Webber, M.S., R.D., Adjunct Faculty, FDNU 1020, FDNU 3850 Instructor

Staff To Be Used In Support Of Program

Full Time

Rose Thayer, Administrative Assistant, Division Foods & Nutrition

Part Time

Kathryn Harrison, Secretary, Division Foods & Nutrition