

LSC Use Only  
Number: 144  
Action: \_\_\_\_\_  
Date: \_\_\_\_\_

UWUCC Use Only  
Number: \_\_\_\_\_  
Action: \_\_\_\_\_  
Date: \_\_\_\_\_

**CURRICULUM PROPOSAL COVER SHEET**  
**University-Wide Undergraduate Curriculum Committee**

**I. Title/Author of Change**

Course/Program Title: FN 212 Nutrition  
Suggested 20 Character Course Title: Nutrition  
Department: Food and Nutrition  
Contact Person: Rita M. Johnson, Joyce A. Rizzo

**II. If a course, is it being Proposed for:**

\_\_\_\_\_ Course Revision/Approval Only  
\_\_\_\_\_ Course Revision/Approval and Liberal Studies Approval  
  x   Liberal Studies Approval Only (course previously has been approved by the University Senate)

**III. Approvals**

Joanne B. Steiner Department Curriculum Committee      Joanne B. Steiner Department Chairperson  
Mia M. Moore-Orritege College Curriculum Committee      Harold C. Wingard College Dean \*

\_\_\_\_\_  
Director of Liberal Studies  
(where applicable)

\_\_\_\_\_  
Provost (where applicable)

\*College Dean must consult with Provost before approving curriculum changes. Approval by College Dean indicates that the proposed change is consistent with long range planning documents, that all requests for resources made as part of the proposal can be met, and that the proposal has the support of the university administration.

**IV. Timetable**

Date Submitted  
to LSC: \_\_\_\_\_  
to UWUCC: \_\_\_\_\_

Semester to be  
implemented: \_\_\_\_\_

Date to be  
published  
in Catalog: \_\_\_\_\_

**FN 212, Nutrition**

**A proposal for inclusion as a Liberal Studies,  
Natural Sciences Non-laboratory Course**

**The Department of Food and Nutrition**

**Rita M. Johnson, Assistant Professor  
Joyce A. Rizzo, Instructor**

**August, 1990**

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**I. CATALOG DESCRIPTION****FN 212 Nutrition****3 credits****3 lecture hours****Prerequisites: 1 semester of laboratory science**

Applies concepts of the biological sciences to human nutrition by explaining sources and functions of nutrients and discussing current nutrition controversies in light of scientific principles. Research findings are discussed and applied to selected nutrition topics including public nutrition policies and individual food choices. Students evaluate their own food and nutrient intake and energy expenditure.

\*Note that the request for a course description change has been filed.

**COURSE SYLLABUS****I. CATALOG DESCRIPTION**

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Prerequisites: 1 semester of laboratory science

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**II. COURSE OBJECTIVES**

After completing the course, the FN 212 student will:

1. assess their nutritional status and plan diets to meet their goals based on an understanding of what constitutes an adequate diet for a normal, healthy adult.
2. understand the fundamentals of nutrition and be able to list the function and food sources of the nutrients.
3. cite examples of the consequences of an over- and under-supply of the energy nutrients, major vitamins and minerals.
4. outline similarities and differences between dietary strategies recommended to minimize the risk of heart disease, hypertension, cancer, and diabetes, citing implicated nutrients.
5. explain the current understanding of the causes of eating disorders and describe the relative effectiveness of diets and exercise in successful weight control.
6. evaluate current nutrition misinformation on the basis of sound nutrition principles.
7. evaluate the nutrition contribution of commercially prepared foods.
8. describe the nutrient needs during growth and development through senescence.
9. interpret and use the nutrition information on product labels to make intelligent food choices.

**III. COURSE OUTLINE****A. Introduction to Nutrition (3 lectures)**

1. What is nutrition?

2. A brief history of nutrition science
  3. How nutrition relates to other sciences
  4. Human food behavior
  5. Who is the expert on nutrition?
- B. Healthy Eating (3 lectures)
1. The nutrients
  2. Recommended nutrient intakes
  3. The government's role in setting nutritional guidelines
  4. Diet planning guides (food group plans)
- C. The Energy Nutrients (10 lectures)
1. Carbohydrates: sugar, starch, and fiber
  2. Lipids: fats and oils
  3. Proteins and amino acids
  4. Alcohol
- D. Energy and Energy Balance (9 lectures)
1. Energy metabolism
  2. Nutrition and exercise
    - a. Fuels for muscular work
    - b. Sports nutrition
    - c. Food for athletic performance
  3. Weight gain and loss
    - a. Body composition
    - b. Current theories of obesity
    - c. Treatment of obesity
    - d. Eating disorders
    - e. Fasting

- E. Vitamins (5 lectures)
  - 1. Fat soluble
  - 2. Water soluble
  - 3. Vitamin Supplements
- F. Water and minerals (5 lectures)
  - 1. Water and electrolytes
  - 2. Major minerals
  - 3. Trace minerals
- G. Nutrition Throughout the Life Cycle (7 lectures)
  - 1. Pregnancy
  - 2. Infancy
  - 3. Childhood and adolescence
  - 4. Middle and advanced age

#### IV. EVALUATION METHODS

The final grade for the course will be determined as follows:

Tests (3-4 objective exams)	400 pts. (67% of final grade)
Diet Analysis Project (see grading sheet attached)	100 pts. (17% of final grade)
** Topical Assignments	50 pts. ( 8% of final grade)
Class Discussion/Quiz on Non-Fiction Reading	20/30 pts. ( 8% of final grade)

- 90% of total points earned - A
- 80% of total points earned - B
- 70% of total points earned - C
- 60% of total points earned - D
- less than 60% total points - F

\*\* Topics will depend upon major issues and current trends in the nutrition field.

#### V. REQUIRED TEXTBOOK

Whitney EN, Hamilton EMN, and Rolfes SR. Understanding Nutrition, 5th edition. West Publishing, St. Paul, MN, 1990.

#### VI. SPECIAL RESOURCE REQUIREMENTS

- A. Ackerman Hall Computer Laboratory  
Microcomputer programs:

West Analysis '90 and Diet Balancer

B. Body Composition Equipment

1. RJL Bioelectrical Impedance System, Model 101
2. Futrex-5000 Infrared Interactance System

VII. BIBLIOGRAPHY

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- Horton, E.S. and Terjung, R.D. Exercise, Nutrition, and Energy Metabolism. Macmillan Publishing Co., New York, NY, 1988.
- Herbert, V. Nutrition Cultism, George F. Stickley Co., Philadelphia, PA, 1981.
- Herbert, V., and Barrett, S. Vitamins and Health Foods: The Great American Hustle. George F. Stickley Co., Philadelphia, PA, 1981.
- McArdle, W.D., Katch, F.I., and Katch, V.L. Exercise Physiology: Energy, Nutrition, and Human Performance, 2nd edition. Lea and Febiger, Philadelphia, PA, 1986.
- Nestle, M. Promoting Health and Preventing Disease: National Nutrition Objectives for the Years 1990 and 2000. Food Technology 42:103, 1988.



Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. Archives of Internal Medicine 148:36-69, 1988.

Stare, F.J. and Whelan, E.M. The 100% Natural, Purely Organic, Cholesterol-Free, Megavitamin, Low-Carbohydrate Nutrition Hoax, Athenum, New York, NY 1983.

The Surgeon General's Report on Nutrition and Health, U.S. Department of Health and Human Services, DHHS Publication No. 88-50210, U.S. Government Printing Office, Washington, DC 30402, 1988.

## FN 212 Project Evaluation Sheet

Name: \_\_\_\_\_

	Possible points	Your Score
<b>Graphs and Worksheets (Total : 10 points)</b>		
-Complete graphs (titles, labels, key) Accurate (correct percentages) Neatness (printing, effective use of color, etc.)	5	_____
-Worksheets (accurate, neatness)	5	_____
<b>Writing (Total : 10 points)</b>		
-Typed (minimum of errors) Grammar and Spelling	5	_____
-Clarity (is writing clear and understandable?)	5	_____
<b>Completeness and accuracy of content in the body of the paper (Total: 20 points)</b>		
-Statements made in accord with with current scientific principles	10	_____
-Correct interpretation of facts	10	_____
<b>Conclusions and statements of feasible changes (Total: 10 points)</b>		
-Conclusions supported by facts in the body of the paper	5	_____
-Suggested changes in personal diet feasible or unrealistic?	5	_____
Part I score	50	_____
Part II score	50	_____
Total	100	_____

## LIBERAL STUDIES COURSE APPROVAL FORM

**About this form:** Use this form only if you wish to have a course included for Liberal Studies credit. The course is intended to assist you in developing your course to meet the University's Criteria for Liberal Studies and to arrange your proposal in a standard order for consideration by the LSC and the UWUCC. If you have questions, contact the Liberal Studies Office, 353 Sutton Hall; telephone 357-5715.

**Do not use this form for technical, professional or pre-professional courses or for remedial courses, none of which is eligible for Liberal Studies. Do not use this form for sections of the synthesis course or for writing-intensive sections; different forms will be available for those.**

### PART I. BASIC INFORMATION

- A. For which category(ies) are you proposing the course? List all that apply.**

#### LEARNING SKILLS

- First English Composition Course  
 Second English Composition Course  
 Mathematics

#### KNOWLEDGE AREAS

- Humanities: History  
 Humanities: Philosophy/Religious Studies  
 Humanities: Literature  
 Fine Arts  
 Natural Sciences: Laboratory Course  
 Natural Sciences: Non-laboratory Course  
 Social Sciences  
 Health and Wellness  
 Non-Western Cultures  
 Liberal Studies Elective

- B. During the transition from General Education to Liberal Studies, should this course be listed as an approved substitute for current General Education course, thus allowing it to meet any remaining General Education needs?**

**If so, which General Education course(s)?**

### PART II. WHICH LIBERAL STUDIES GOALS WILL YOUR COURSE MEET?

Indicate by number all that apply, specify whether the goal is primary or secondary, and include an explanation for each.

All Liberal Studies courses must contribute to at least one of these goals; most will meet more than one. As you identify them by number, please indicate whether you consider them to be primary or secondary goals of the course and include an explanation for each. (For example, a history course might assume "historical consciousness" and "acquiring a body of knowledge" as its primary goals but it might also enhance inquiry skills or literacy of library skills.) Keep in mind that no single course is expected to shoulder all by itself the responsibility for meeting these goals; our work is supported and enhanced by that of our colleagues teaching other courses.

**A. Intellectual Skills and Modes of Thinking:**

1. Inquiry, abstract logical thinking, critical analysis, synthesis, decision making and other aspects of the critical process.
2. Literacy — writing, reading, speaking, listening
3. Understanding numerical data
4. Historical consciousness
5. Scientific inquiry
6. Values (ethical mode of thinking or application of ethical perception)
7. Aesthetic mode of thinking

**B. Acquiring a Body of Knowledge or Understanding Essential to an Educated Person**

**C. Understanding the Physical Nature of Human Beings**

**D. Certain Collateral Skills:**

1. Use of the library
2. Use of computing technology

**Part II, Parts A-D****Which Liberal Studies Goals Will Your Course Meet?**

A1. Primary: Through the lecture and discussion opportunities in this course the students will develop skills in the synthesis and application of nutrition principles to their own lifestyle. Emphasis on how to evaluate valid nutrition principles from fraudulent promotions is provided throughout the course. Additionally, the students will assess their own nutrition consumption practices and evaluate this information and recommend possible lifestyle changes. The assignments in this course are designed to meet these goals.

A2. Primary: Nutrition literacy is a major goal of this course. In addition to reading the text, students will formally and informally evaluate nutrition information available through the mass media. These assignments may include reading and evaluating: food labels, popular diets, newspaper and magazine articles, or watching television shows. As topics change these assignments will also change to meet needs and interests. The major written work in the course involves keeping a record of food intake and energy expenditure, a computer analysis of food intake, and a written assessment of strengths with suggestions to improve weaknesses.

A3. Primary: Students will apply numerical data in a variety of ways. These include: using percentages to compare nutrient intake to the U.S. Dietary Goals and the Recommended Dietary Allowances, calculating calories of energy expenditure, calculating calories in foods, and assessing the quality of calories ingested to the calories expended.

A5. Primary: The science of nutrition is based in the natural sciences. Inherent to this, lecture material will emphasize nutrition principles that have been validated by scientific research. Students will apply these as they assess valid and invalid nutrition information.

A6. Secondary: This course assists in the student's ability to make value judgments and choices that can alter one's well being. The lectures and assignments are designed to provide the student with information about the results of potential long term consequences of a variety of nutritional practices. With this information the student can then evaluate his/her own food consumption behavior.

B. Primary: Every educated person should know basic nutrition principles. Research in the last two decades has linked nutrition practices and lifestyle with several chronic diseases. Students in this course will acquire a body of nutrition knowledge in more depth than in either Health and Wellness or Liberal Studies elective courses. The prerequisite of another science course provides the student with a background that complements this course and means that less lecture time needs to be spent on basic principles and more time can be spent applying them. This knowledge base will provide information that can be applied throughout the life cycle to an individual, family member, and most professions.

C. Primary: Nutrition is an interrelated science. It combines concepts from the physical and biological sciences and social sciences. These concepts combine to explain digestion and metabolism of food, nutrient needs for different stages of the life cycle, and behavioral explanations for eating behaviors. A principle focus of the subject content is to help the student understand how other nutrients function in the body and how altering their consumption influences health.

D2. Secondary: Computing technology will be used for assessment of nutrient intake and to compare these to the Recommended Dietary Allowances.

**PART III. DOES YOUR COURSE MEET THE GENERAL CRITERIA FOR LIBERAL STUDIES? Please answer these questions.**

- A.** If this is a multiple-section, multiple-instructor course, there should be a basic equivalency (though not necessarily uniformity) among the sections in such things as objectives, content, assignments and evaluation. Note: this should not be interpreted to mean that all professors must make the same assignments or teach the same way; departments are encouraged to develop their courses to allow flexibility which contributes to imaginative, committed teaching and capitalizes on the strengths of individual faculty.

**What are the strategies that your department will use to assure that basic equivalency exists? Examples might be the establishment of departmental guidelines, assignment of responsibility to a coordinating committee, exchange and discussion of individual instructor syllabi, periodic meetings among instructors, etc.**

- B.** Liberal Studies courses must include the perspectives and contributions of ethnic and racial minorities and of women whenever appropriate to the subject matter. If your attached syllabus does not make explicit that the course meets this criterion; please explain how it will.
- C.** Liberal Studies courses require the reading and use by students of at least one but preferably more substantial works of fiction or nonfiction (as distinguished from textbooks, anthologies, workbooks or manuals). Your attached syllabus must make explicit that the course meets this criterion.

(The only exception is for courses whose primary purpose is the development of higher level quantitative skills; such courses are encouraged to include such reading but are not expected to do so at the expense of other course objectives. If you are exercising this exception, please justify here.)

- D.** If this is an introductory course intended for a general student audience, it should be designed to reflect the reality that it may well be the only formal college instruction these students will have in that discipline, instead of being designed as the first course in a major sequence. That is, it should introduce the discipline to students rather than introduce students into the discipline. If this is such an introductory course, how is it different from what is provided for beginning majors?

**Part III, Parts A-D****Does Your Course Meet The General Criteria For Liberal Studies?**

A. Our department is small and only four people currently teach this course. We continually share syllabi and teaching materials in an effort to provide a similar course to all sections and to avoid a duplication of efforts. The department plans to catalog all departmentally owned videotapes, software, and other teaching materials and keep them in one place. They will be shared by faculty from this location. When enrollment in this course enlarges, the faculty will meet to coordinate syllabi. Traditionally, all students perform the "Diet and Exercise Evaluation" assignment; individual faculty may change other assignments as current issues in nutrition or instructor expertise changes.

B. This course addresses nutrition needs for both men and women, in various stages of the life cycle. Areas typically explored include: incidence of chronic disease among men and women and whites and blacks, difference in nutrient needs between men and women and between pregnant, non-pregnant, and lactating women, changing nutrient needs between pre- and post-pubertal adolescents. The syllabus does not state these comparisons because they are used in various situations, as appropriate.

C. There are a variety of books written about health and nutrition misinformation and quackery. Several of the best known are included in the bibliography and several more are in-press. For the non-fiction reading assignment students will be provided with an annotated bibliography of a minimum of six books and they will choose one. At the end of the semester, each group of students will participate in a discussion of this book for the rest of the class. Faculty will write a quiz for each of the books and students will also take the quiz for their respective book. Students will earn a maximum of 20 points on the quality of their class discussion and 30 points on the quiz (see page 5).

D. FN 212, Nutrition, is not an introductory course intended for a general student audience. Currently, and as a non-laboratory course in Liberal Studies, this course has a prerequisite of a science course. This course is different from other nutrition courses in Liberal Studies in that the student is introduced to more detail and scientific interpretation of data and nutrition information.



**E. The Liberal Studies Criteria indicate six ways in which all courses should contribute to students' abilities. To which of the six ways will your course contribute? Indicate by number all that apply and include an explanation for each.**

1. Confront the major ethical issues which pertain to the subject matter; realize that although "suspended judgment" is a necessity of intellectual inquiry, one cannot live forever in suspension; and make ethical choices and take responsibility for them.
2. Define and analyze problems, frame questions, evaluate available solutions and make choices
3. Communicate knowledge and exchange ideas by various forms of expression, in most cases writing and speaking
4. Recognize creativity and engage in creative thinking
5. Continue learning even after the completion of their formal education
6. Recognize relationships between what is being studied and current issues, thoughts, institutions and/or events

**PART IV. DOES YOUR COURSE MEET THE CRITERIA FOR THE CURRICULUM CATEGORY IN WHICH IT IS TO BE LISTED?**

Each curriculum category has its own set of specific criteria in addition to those generally applicable. The LSC provides copies of these criteria arranged in a convenient, check-list format. Select the one(s) that apply, mark them appropriately, and include them with your proposal. The attached syllabus should indicate how your course meets each criterion you check. If it does not do so explicitly, please attach an explanation.

A copy of this form can be found on electronic mail as well as on floppy disk in the main office of each academic department.

**Part III, Part E**

E2. Lecture information provides the scientific information about nutrition and applies it to current events and controversies. Discussions and assignments ask the student to evaluate situations and use lecture information to explain the choice that they would make.

E3. This course will utilize classroom discussions and written assignments to enhance students' communication abilities.

E5. This course provides an overview of the science of nutrition with particular application to adults. Students learn information that they will be able to apply to their own lives and the lives of others.

E6. A major thrust of this course is to use current issues to apply and advance the students' understanding and application of nutrition knowledge.

## CHECK LIST — NATURAL SCIENCES (Non-laboratory)

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### Knowledge Area Criteria which the course must meet:

- \_\_\_\_\_ Treat concepts, themes and events in sufficient depth to enable students to appreciate the complexity, history and current implications of what is being studied; and not be merely cursory coverage of lists of topics.
- \_\_\_\_\_ Suggest the major intellectual questions/problems which interest practitioners of a discipline and explore critically the important theories and principles presented by the discipline.
- \_\_\_\_\_ Allow students to understand and apply the methods of inquiry and vocabulary commonly used in the discipline.
- \_\_\_\_\_ Encourage students to use and enhance, wherever possible, the composition and mathematics skills built in the Skill Area of Liberal Studies.

### Natural Science Criteria which the course must meet:

- \_\_\_\_\_ Examine a body of knowledge of natural science that will contribute to an understanding of the natural world.
- \_\_\_\_\_ Provide an understanding of the development of natural science theories and their modification.
- \_\_\_\_\_ Teach students to formulate and test hypotheses.
- \_\_\_\_\_ Provide an understanding of some of the "great moments" in the history of natural science and the individuals, including women and minorities, responsible for them.

### Additional Natural Science Criteria which the course should meet:

- \_\_\_\_\_ Encourage an appreciation of the complex interrelationship of natural science with the life of the individual.
- \_\_\_\_\_ Develop in students the abilities necessary to cope with the consequences of natural science in the modern world.
- \_\_\_\_\_ Develop an inquiring attitude consistent with the tenets of natural science, an attitude that is willing to expose fallacy on the basis of reason, that demands evidence for scientific assertions and yet is tolerant of hypotheses in the absence of contradictory evidence.

**Part IV. Does Your Course Meet the Criteria For The Curriculum Category In Which It Is To Be Listed?**

**Natural Sciences (Non-laboratory)**

**Knowledge Area Criteria:**

1. As a survey course, FN 212 does not go into depth with each topic. However, several areas are considered in depth. These include: the relationship of diet to heart disease, osteoporosis, and hypertension. Additionally, the hypothesized effects of fiber in the diet and facts and fallacies about supplementation are discussed. As important issues change, so will the areas that are discussed in-depth.
2. As discussed in number one above, the major questions/problems of practitioners are exactly those which are discussed in-depth.
3. Both lecture, the text, and written assignments allow students to ask questions, learn, and practice the technical language used in nutrition.
4. Students will practice composition skills with the written assignments and use mathematics skills to interpret percent calculations that are often used in nutrition.

**Natural Science Criteria:**

5. Nutrition is an interrelated science that utilizes concepts from the natural sciences. Specifically, FN 212 uses concepts from biology, anatomy, physiology, and inorganic, organic, and biochemistry.
6. Nutrition is based in the scientific method and theories developed by the natural sciences.
7. Current nutrition issues are used as examples of hypotheses and lecture discussions show how these are currently under investigation.
8. Historical events are incorporated into lectures and typically occur at the beginning of a new lecture topic (e.g. history of various vitamins and minerals).

**Additional Natural Science Criteria:**

9. Nutrition is integrally tied to the natural sciences and nutrition practices have an effect on the quality of life. This interrelationship is apparent throughout FN 212.
10. Using current nutrition issues to apply scientific principles to actual situations will give the student both examples and practice so that they can apply the principles used in future problem-solving situation.
11. FN 212 uses the tenets of natural science to discuss nutrition facts and explain the fallacies. Current hypotheses are explained by applying scientific principles and unresolved controversies are also presented.