

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

EP.00.27

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



April 24, 2000

Raymond M. Leuthold, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Leuthold:

Enclosed are copies of a proposal from the College of Agricultural, Consumer and Environmental Sciences to revise the undergraduate major in Food Science.

This proposal has been approved by the Department and by the College; it now requires Senate review.

Sincerely,

A handwritten signature in cursive script that reads "Karen M. Carney".

Karen M. Carney
Assistant Provost

KMC/cd

Enclosures

c: W. Banwart
K. Campbell
B. Chassy
S. Gonzo
R. McBride

UNIVERSITY OF ILLINOIS
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College of Agricultural, Consumer
and Environmental Sciences

Academic Programs
104 Mumford Hall, MC-710
1301 West Gregory Drive
Urbana, IL 61801



March 20, 2000

Senate Ed Policy Committee
Ray Leuthold, Chair
343 Mumford Hall
MC 710

Dear Dr. Leuthold,

Enclosed is a Proposed revision of the Food Science Option (curricula code 156101) in the Food Science and Human Nutrition major in the College of ACES. The requested revisions respond to requirements from the Institute of Food Technologists (IFT) as well as strengthening the existing curricula. This proposal has been approved by the Department of Food Science and the College of ACES.

We look forward to the review by your committee and hopefully forwarding it to the Senate.

Sincerely,

A handwritten signature in black ink that reads 'Wayne Banwart'.

Wayne Banwart
Assistant Dean

WLB/mlc

cc: Kris Campbell
Bruce Chassy
Rebecca McBride

COLLEGE OF AGRICULTURAL COMSUMER AND ENVIRONMENTAL
SCIENCES

Department of Food Science & Human Nutrition

Revision of the Food Science Option in Food Science & Human Nutrition

Sponsor: College of Agricultural, Consumer and Environmental Sciences
Kris Campbell, Assistant to the Head, Academic Programs
Department of Food Science & Human Nutrition
382-C AESB, MC 646. 244-4405

Brief Description:

Reduce the number of required credits in Humanities and Social Sciences from nine to six each for the Food Science option. Expand the required curriculum in Food Science to include a course in nutrition, introductory foods laboratory, food chemistry laboratory, and additional selection of courses to meet the capstone experience requirement.

Justification:

The Committee on Education of the Institute of Food Technologists (IFT) reviewed the Food Science curriculum for the approval of the curricular standards for food science and submitted their report in May 1998. The Committee identified a number of discrepancies and items that would need to be changed to meet these standards. In response to these curricular recommendations, the Courses and Curriculum Committee began evaluating the Food Science curriculum fall semester, 1998. As a result of the review process, considerable time was spent rethinking what experiences and courses food science students should have during their tenure at UIUC. New courses have been created, existing courses expanded, and additional courses required in response to the IFT recommendations and this internal review process.

There would be substantial benefit to FSHN students, in particular those in the food science option, if we required 6 hours of humanities and social sciences. Currently nine hours each of humanities and social science are required.

Budgetary and Staff Implications:

No additional staff or financial resources are required within the Department of Food Science and Human Nutrition to initiate and maintain the revised five options in Food Science and Human Nutrition. The one new course, FSHN 366 – Product Development, has been a Special Problems course for three years, and therefore staff and funding requirements were previously budgeted.

Guidelines for Undergraduate Education:

The new food science curriculum will more effectively prepare the food science majors for successful careers in the field of food industry.

Clearance:

Bruce M. Clary
Head, Department of Food Science
and Human Nutrition

2/15/00
Date

Wayne Borcut
Courses & Curriculum Committee,
College of Agricultural, Consumer
and Environmental Sciences

2/15/00
Date

David L. Chicone
Dean, College of Agricultural, Consumer
and Environmental Sciences

2-20-00
Date

Food Science Option

This option exposes students to all components of food production: harvesting and raw-product handling, food-processing procedures and techniques, packaging, food storage, and quality control. Students selecting this option are prepared for careers in many areas of the food industry. A minimum of 130 hours of credit is required for graduation.

PRESCRIBED COURSES INCLUDING CAMPUS GENERAL EDUCATION

English Composition and Speech **Hours**

SPCOM 111 Verbal Communication 3

and

SPCOM 112 Verbal Communication 3

OR

SPCOM 101 Principles of Effective Speaking 3

and one of the following two courses

RHET 105 Principles of Composition 4

RHET 108 Forms of Composition 4

Composition II 3

Quantitative Reasoning **Hours**

MATH 120 Calculus and Analytical Geometry, I 5

OR

MATH 134 Calculus for Social Scientists, I 4

OR

MATH 135 Calculus 5

Statistics: Choose from ACE 261; CPSC 141; ECON 172;
MATH 161; PSYCH 235; SOC 185; STAT 100 3-4

Humanities: Six hours from approved campus list 6

Cultural Studies: Non-Western and Western---three hours of each
(for complete list of available Cultural Studies courses, visit
<http://www.uiuc.edu/providers/provost/gened.html>) 6

Social Sciences: Six hours from approved list: 6

OTHER PRESCRIBED COURSES

Natural Science **Hours**

CHEM 101/105 General Chemistry/Laboratory 4

CHEM 102/106 General Chemistry/Laboratory 4

CHEM 231 Elementary Organic Chemistry 3

CHEM 234 Elementary Organic Chemistry Laboratory 2

MCBIO 100 Introductory Microbiology 3

MCBIO 101 Introductory Experimental Microbiology 2

MCBIO 312 Techniques of Applied Microbiology 2

PHYCS 101 General Physics (Mechanics, Heat and Sound) 5

PHYCS 102 General Physics (Light, Electricity, Magnetism
and Modern Physics) 5

Select one course from the following four selections:

BIOL 104 Animal Biology 4

BIOL 120 Genetics, Evolution and Biodiversity 5

PLBIO 100 Plant Biology 4

PHYSL 103 Introduction to Human Physiology 4

AGRICULTURE PRESCRIBED COURSES

ACES 100	Contemporary Issues in the Agricultural, Consumer and Environmental Sciences	2
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FOOD SCIENCE AND HUMAN NUTRITION COURSES

FSHN 101	Introd. to Food Science and Human Nutrition	3
FSHN 120	Contemporary Nutrition	3
FSHN 131	Introductory Foods Laboratory	3
FSHN 202	Sensory Evaluation of Foods	3
FSHN 213	Food Analysis I	4
FSHN 260	Raw Materials for Processing	4
FSHN 298	Undergraduate Seminar	1
FSHN 314	Food Chemistry	4
FSHN 315	Food Biochemistry & Biotechnology	3
FSHN 316	Food Chemistry Laboratory	2
FSHN 360	Food Engineering	3
FSHN 361	Food Processing I	3
FSHN 362	Food Processing II	3
FSHN 371	Food and Industrial Microbiology	3
FSHN 372	Sanitation in Food Processing	7

Select one capstone course from the following suggested selections:

A Capstone experience courses must be approved by the student's advisor prior to enrollment. Some examples include:

FSHN 366	Product Development	3
AG E 385	Food and Process Engineering Design	2

OPEN ELECTIVES 12-22

Minimum of 130 hours required for graduation

BS Degree in Food Science and Human Nutrition
Option: Food Science

FALL		SPRING	
Freshman Year			
ACES 100	2	CHEM 102	3
FSHN 101	3	CHEM 106	1
CHEM 101	3	MATH 134 or 120	4-5
CHEM 105	1	SPCOM 101/RHET 105	3-4
SPCOM 101/RHET 105	3 - 4	FSHN 120	3
Humanities/Social Science/CS	<u>3</u>		
Total	15-16	Total	14-16

Sophomore Year			
MCBIO 100	3	FSHN 131	3
MCBIO 101	2	FSHN 213*	4
CHEM 231	3	PHYCS 101	5
CHEM 234	2	Statistics ¹	3-4
FSHN 260*	4	Humanities/Social Science/CS	3
FSHN 298*	<u>1</u>		
Total	15	Total	18-19

¹Select from ACE 261; CPSC 141; ECON 172; MATH 161; PSYCH 235; SOC 185; or STAT 100

Junior Year			
FSHN 202*	3	Biological Science ²	4-5
FSHN 314*	3	FSHN 315*	3
FSHN 316*	2	FSHN 360*	3
PHYCS 102	5	FSHN 371*	3
Humanities/Social Science/CS	<u>3</u>	MCBIO 312*	<u>2</u>
Total	16	Total	15-16

² Select from BIOL 104 or 120; or PLBIO 100; or PHYSL 103

Senior Year			
FSHN 361*	3	FSHN 362*	4
Humanities/Social Science/CS	3	FSHN 372*	2
Composition II	3	Humanities/Social Science/CS	3
Capstone Experience* ³	3	Open Electives	6-8
Open Electives	<u>3</u>		
Total	18	Total	15-17

³Select one capstone course from list of suggested courses

*Course is offered only once/year during designated semester

Additional open electives may be required beyond the courses listed above to meet the minimum amount necessary for graduation. Please work with your advisor to determine the best way to fulfill graduation requirements.

Total Hours required (minimum) 130