A g e n d a
CALS Curriculum Committee Meeting Tuesday, March 12, 2013, 12:00 p.m. 250 Agricultural Hall

Members:		
Francisco Pelegri,(2013) Jeri Barak, (2014) Bill Bland, (2014)	Amin Fadl, (2013) Randy Jackson, (2013) Maya Hayslett, (2013)	Jack Kloppenburg, (2015) Paul Mitchell, (2013) Masarah Van Eyck, (2015)
CALS Ex Officio: Sarah Pfatteicher	CASI Ex Officio: Liv Sandberg (non-voting)	Student Reps: Tim Pearson UP&S Office: Susan Gisler Dan Statter
February 26, 2013 minutes	MINUTES	
	NEW BUSINESS	
Curriculum Revisions:		
-*Committee reviewed p -Current curriculum she -Memo concerning degr -Letter from Chair, Food  Food Science -*Committee will review -Current curriculum she -Proposed curriculum she	ree requirement change d Science y proposals next week ret	neeting
No Known Revisions:		
Agricultural and Applied Economic Agricultural Business Management Agronomy Animal Sciences Biochemistry Biology Biological Systems Engineering Community and Environmental Science Entomology	t Genetics Horticulture Landscape A Life Science Microbiolog Nutritional S pociology Plant Patholo Poultry Scie Soil Science	Architecture as Communication y Science ogy nce
Environmental Sciences	Wildlife Eco	ology

#### ANNOUNCEMENTS

### **MINUTES**

CALS Curriculum Committee Meeting Tuesday, February 27, 2013, 12:00PM 250 Agriculture Hall

Present: Francisco Pelegri, Amin Fadl, Bill Bland, Randy Jackson, Jack Kloppenburg, Liz Sandberg,

Masarah Van Eyck, Sarah Pfatteicher

Absent: Jeri Barak, Paul Mitchell,

Bland motions, Jackson seconds to call meeting to order at 12:03 PM.

#### **Minutes**

02/12/13 Minutes

Unanimously approved

#### **Course Proposals**

Lead: Amin

Lead: Amin

Lead: Bill

#### Course Change Proposals

**BioChem. 510: Biochemical Principles of Human and Animal Nutrition** *Changing prerequisites.* 

Committee found proposal to be straight-forward: change in prerequisites to be consistent with other courses. Committee makes **friendly amendment** to request the need for the change in the justifications section of the proposal document.

Unanimously approved

#### BioChem. 704: Chemical Biology

Tabled from 01-22-13. Changing crosslisting

Committee found proposal to be straight-forward: change in cross-listing. Committee states the change is necessary for chemical/biology PhD students.

Unanimously approved

#### Pharm. Sci 890: Highlights at the Chemistry-Biology Interface I

Changing "repeatability." Department requesting committee input.

Committee found proposal to be straight-forward: discussed "repeatability" as way to make it easier for students to partake in scholarly community.

Unanimously approved

#### Pharm. Sci 891: Highlights at the Chemistry-Biology Interface II

Changing "repeatability." Department requesting committee input.

Committee clarified that if Pharm. Sci department wishes to crosslist with another department, proposal to do so should come from Pharm Sci department.

Lead: Bill

Lead: Masarah

Unanimously approved

#### Food Science 603: Senior Seminar

Changing course description

Committee found proposal to be straight-forward and simple. Committee found typo in proposal: no change to Comm. B requirement.

Unanimously approved

New Course Proposals

Zoology 953: Introduction to Wisconsin Ecology: A graduate seminar Lead: Randy

Changing crosslisting. "This course fills a gap in all Wisconsin Ecology member departments."

Committee explains there is no such thing as "Wisconsin Ecology Department."

Committee offers **friendly amendment** that there ought to be more buy-in from other CALS units (e.g. Agronomy, Soil Sciences, Community and Environmental Sociology) and to see if faculty from those departments would be interested in crosslisting courses.

Committee requests that "Wisconsin Ecology" be clarified and more inclusive.

Committee states there is no grading scale and an incorrect course number listed in the syllabus.

Unanimously approved

#### **Other Business**

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#### **Announcements**

Motion to close meeting by Fadl, seconded by Jackson at 1:12PM

Submitted Dan Statter,



These requirements were last reviewed by the CALS Curriculum Committee in 2010-11 and must undergo their next review by 2014-15.

#### Curriculum Sheet Dietetics Degree Nutritional Sciences Major

CALS Graduation Eligibility Requirements	Advisor/Advisee Notes:
Minimum of 120 degree credits	
Minimum 2.0 Cumulative GPA	
Last 30 Credits in Residence	
<u>UW Requirements</u>	
Courses may not double count within university requirements, but courses counted toward	
university requirements may also be used to satisfy a college requirement &/or a major	
requirement.	
Communication Part A (2-3 cr.) Designated "a" in the Course Guide.	
Communication Part B (2-3 cr.) Designated "b" in the Course Guide.	
Quantitative Reasoning Part A (3 cr.) Designated "q" in the Course Guide.	
Quantitative Reasoning Part B (3 cr.) Designated "r" in the Course Guide.	
Quantitative recusering rare b (b orr) besignated in the course carde.	
Ethnic Studies (3 cr.) Designated "e" in the Course Guide.	
Humanities/Literature/Arts (6 cr.) Designated H, L, X, or Z in the Course Guide.	
Social Sciences (3 cr.) Designated S, W, Y, or Z in the Course Guide.	
CALS Requirements  Courses may not double count within college requirements, but courses counted toward college requirements may also be used to satisfy a university requirement &/or a major requirement.	
First-Year Seminar (1 cr.) See DARS or	
http://www.newstudent.wisc.edu/practices/CALS.php for full list.	
Students who transfer into CALS after freshman year and continuing students who move	
to the B.S. degree should consult with Undergrad Programs & Services (116 Ag Hall)	
regarding completion of this requirement.	
International Studies (3 cr.) List of eligible International Studies courses can be found at:	
http://www.cals.wisc.edu/students/undergraduate-programs/curriculum-	
information/cals-international-studies-courses/	
Must complete 3 credits of International Studies coursework.	
Physical Science Fundamentals (3 cr.) Must complete one General Chemistry course from	
the following list: CHEM 103, 108, 109. Consult major requirements prior to selecting.	
Biological Science (5 cr.) Designated B or Y in the Course Guide.	
Additional Science (3 cr.) Designated B, P, N, W, X, or Y in the Course Guide.	
Science Breadth (3 cr.) Designated B, P, N, S, W, X, or Y in the Course Guide.	

#### Possible Overlaps Between UW, CALS, & Major Requirements

Communication Part A

Communication Part B

Quantitative Reasoning Part A

Quantitative Reasoning Part B

**Social Sciences** 

**Physical Science Fundamentals** 

**Biological Science** 

**Additional Science** 

Science Breadth

#### **Admission to Dietetics Degree Program**

Students will have PDI classification until admission to the Dietetics Degree Program (ADI classification). Departmental approval required.

To be admitted to the B.S. Dietetics program, the following requirements must be met effective Fall 2009:

- 1. A minimum overall cumulative GPA of 2.800
- 2. A minimum mean GPA of 2.800 in the following required\* courses:

Chem 103 and 104, or 109

Zoology 101 and 102, or 151

**Nutritional Sciences 332** 

Physiology 335

Food Science 301

Psychology 202 or statistics (Psych 210, Soc 360, Stat 201, 301, or 371)

or a communication course listed under the Dietetics Degree Requirements, below.

\*Any transfer course from another university that will be used to meet the above required courses must be included in the GPA calculation. If the same course is taken more than once, only the grade from the last time the course was taken will be used in the GPA calculation.
\*\*Effective Fall 2012, Microbio 101 or 303 is no longer a requirement for admission to the Dietetics Degree Program. It is still a requirement for the Dietetics Degree.

#### **Dietetics Degree Requirements**

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement &/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere.

#### Communication (5-6 cr.)

One group required:

#### Group 1

One oral course from: COM ARTS 100 (a), 105, 262 (b, H), 266 (b, S), 272 (b, S), L SC COM 360 (b)

One written course from: L SC COM 111 (b), 212 (b), ENGLISH 201 (b), GEN BUS 300, E P D 397 (b), BIOLOGY/BOTANY/ZOOLOGY 152 (b, B)

#### Group 2

\_\_\_\_L SC COM 100 (a) and 212 (b)

Mathematics and Statistics (6-9 cr.)
MATH 112 (q) or 114 (q) or may be satisfied by placement exam (q)  Note that placement into MATH 114 does not guarantee that credit has been
earned for MATH 112.
One course from: PSYCH 210 (r), SOC 360 (r), STAT 201 (r), 301 (r), 371 (r)
One course from: 1 31cm 210 (1), 30c 300 (1), 31A1 201 (1), 301 (1), 371 (1)
Chemistry (11-15 cr.)
CHEM 103 (P) and 104 (P) or CHEM 109 (r, P)
CHEM 341 (P) or 343 (P)
BMOLCHEM 314 (P) or 503 (B) or BIOCHEM 501 (P)
Biology (10 cr.)
<u>Biology</u> (10 Cr.)  ZOOLOGY 101 (B) and 102 (B) or ZOOLOGY 151 (B)
MICROBIO 101 (B) and 102 (B) or MICROBIO 303 (B) and 304 (B)
(Consult advisor about combining MICROBIO 303 with MICROBIO 102.)
(00104:104:104:104:104:104:104:104:104:10
Foundation (13-14 cr.)
PHYSIOL 335 (B)
PSYCH 202 (S)
M H R 300 (S)
One course from: AGRONOMY 379 (B), INTER-HE 427, 428, 515, ED PSYCH 301 (S)
<u>Core</u> (24 cr.)
FOOD SCI 301
FOOD SCI 437
FOOD SCI 438
FOOD SCI 537
NUTR SCI 200
NUTR SCI 332 (B)
NUTR SCI 431 (B)
BIOCHEM/NUTR SCI 510 (B)
NUTR SCI 631 (B)
Capstone (3 cr.)
NUTR SCI 500 and 520
Recommended Dietetics Electives
ACCT I S 300 (r), ANATOMY 328 (B), COM ARTS 368 (S), COUN PSY 650 (S), C&E SOC 222 (S),
FOOD SCI 324 (B), 325 (B), 410 (B), 412, GEN&WS 103, KINES 314 (B), MARKETING 300 (S),
NURSING 105 (S), 600, 746, NUTR SCI 350 (B), 540 (B), 621, 635, 672, PATH 404 (B), PHM SCI
401 (R) POP HITH 575 (R) SOC 531 (S)

#### **Log of Changes**

5/31/12: Curriculum sheet and four year plan changed to remove 'Microbio 101 or 303' as an admission requirement to the Dietetics Degree Program effective Fall 2012. Footnote added in the curriculum sheet explaining this. (MS)

7/23/12: At request of department, text added to Math requirement section: "Note that placement into MATH 114 does not guarantee that credit has been earned for MATH 112."



**MEMO** 

DATE: November 27, 2012

TO: CALS Curriculum Committee

FROM: Lynette M. Karls, Chair-Curriculum Committee, Dept. of Nutritional Sciences

In October 2012, the Department of Nutritional Sciences (DNS) Curriculum Committee voted to take a motion to the DNS Faculty to delete FS 301 from the list of pre-requisite courses required for ADI admission. The faculty voted and passed the following motion on October 31, 2012:

## Motion: Delete FS 301 from list of pre-requisite courses required for ADI admission, effective Fall 2013.

- Allows Department of Food Science to add pre-requisite of "ADI" to FS 301; decreasing numbers of dietetics students needing this course.
- Reduces the total number of credits of pre-requisite courses to 25 cr. (consistent with School of Nursing).

NOTE: Proposed DPD Application is attached to the email with this document.

This change is intended to reduce somewhat the enrollment pressure on FS 301, since PDI students will not need to take this course. In addition, the change should help ensure that students taking the course are better prepared to succeed in it, since they will have passed the hurdle of admission.

NOTE: A letter from the Department of Food Science indicating the department's vote of support for this change is also attached to the email (FS301.doc).

Department of Nutritional Sciences

College of Agricultural and Life Sciences

1415 Linden Drive ■ Madison, WI 53706-1571



March 8, 2013

To Whom It May Concern,

This letter reflects an approved motion by the Food Science Faculty/Staff committee to express our support for Nutritional Science to delete FS 301 from the list of prerequisite courses required for ADI admission. Any questions or clarifications may be directed to my attention.

Kind regards,

Scott A. Rankin Professor and Chair

Department of Food Science

Ka. H.L.



These requirements were last reviewed by the CALS Curriculum Committee in 2010-11 and must undergo their next review by 2014-15.

# Curriculum Sheet Bachelor of Science Degree Food Science Major

CALS Graduation Eligibility Requirements	Advisor/Advisee Notes:
Minimum of 120 degree credits	
Minimum 2.0 Cumulative GPA	
Last 30 Credits in Residence	
<u>UW Requirements</u>	
Courses may not double count within university requirements, but courses counted toward	
university requirements may also be used to satisfy a college requirement &/or a major	
requirement.	
Communication Boot A (2.2 an) Decimands of "a" in the Communication	
Communication Part A (2-3 cr.) Designated "a" in the Course Guide.	
Communication Part B (2-3 cr.) Designated "b" in the Course Guide.	
Quantitative Reasoning Part A (3 cr.) Designated "q" in the Course Guide.	
Quantitative Reasoning Part B (3 cr.) Designated "r" in the Course Guide.	
Ethnic Studies (3 cr.) Designated "e" in the Course Guide.	
Humanities/Literature/Arts (6 cr.) Designated H, L, X, or Z in the Course Guide.	
Social Sciences (3 cr.) Designated S, W, Y, or Z in the Course Guide.	
CALS Requirements	
Courses may not double count within college requirements, but courses counted toward	
college requirements may also be used to satisfy a university requirement &/or a major	
requirement.	
First-Year Seminar (1 cr.) See DARS or	
http://www.newstudent.wisc.edu/practices/CALS.php for full list.	
Students who transfer into CALS after freshman year and continuing students who	
move to the B.S. degree should consult with Undergrad Programs & Services (116 Ag	
Hall) regarding completion of this requirement.	
International Studies (3 cr.) List of eligible International Studies courses can be found	
at:	
http://www.cals.wisc.edu/students/undergraduate-programs/curriculum-	
information/cals-international-studies-courses/	
Must complete 3 credits of International Studies coursework.	
Physical Science Fundamentals (3 cr.) Must complete one General Chemistry course	
from the following list: CHEM 103, 108, 109. Consult major requirements prior to	
selecting.	
Biological Science (5 cr.) Designated B or Y in the Course Guide.	
Additional Science (3 cr.) Designated B, P, N, W, X, or Y in the Course Guide.	
Science Breadth (3 cr.) Designated B, P, N, S, W, X, or Y in the Course Guide.	

Possible Overlaps Between UW, CALS, & Maj	or Requirements
Communication Part B	
Quantitative Reasoning Part A	
Quantitative Reasoning Part B	
Social Sciences	
Physical Science Fundamentals	
Biological Science	
Additional Science	
Science Breadth	
Food Science Major Requirements	
Courses may not double count within the maj	or (unless specifically noted otherwise), but
courses counted toward the major requireme	
requirement &/or a college requirement. A m	
the major that are not used elsewhere.	·
NUTR SCI 350 is recommended to fulfill the CA	ALS International Studies requirement.
Mathematics and Statistics (8 cr.)	
This major requires calculus. Prerequisites ma	ay need to be taken before enrollment in
calculus. Refer to the Course Guide for inform	
MATH 211 (r) or 217* (r) or 221 (r)	
STAT 224 (r) or 301 (r) or 371** (r)	
*MATH 217 requires MATH 171 as a prerequis	site.
**STAT 371 recommended.	
Chemistry (5-9 cr.)	
CHEM 103 (P) and 104 (P) or CHEM 109	(r D)
CITEIN 103 (F) and 104 (F) of CITEIN 109	(1, F)
Dhysics (4 F or )	
Physics (4-5 cr.)	n\*
PHYSICS 103 (r, P) or 201 (r, P) or 207 (r,	
*Students in the Natural Science track have ac	dutional physics requirements. See below.
Natural Science Track	Business Track
Chemistry (8 cr.)	Chemistry (3 cr.)
CHEM 343 (P) and 344 (P) and 345 (P)	CHEM 343 (P)
	G.1.E.W 3 13 (t )
Biology (16-18 cr.)	Biology (13 cr.)
One of the following subsets:	One of the following courses/sets:
one of the following subsets:	BIOLOGY/BOTANY/ZOOLOGY 151 (B)
Biochem/Bot/Microbio/Zoo Subset	BOTANY 130 (B)
One of the following sets:	ZOOLOGY 101 (B) and 102 (B)
BIOLOGY/BOTANY/ZOOLOGY 151 (B)	MICROBIO 101 (B) or 303 (B)
and 152 (b, B)	
, , ,	MICROBIO 102 (B) or 304 (B)
BOTANY 130 (B) and ZOOLOGY 101	BIOCHEM 501 (P)
(B) and 102 (B)	
MICROBIO 101 (B) or 303 (B)	
MICROBIO 102 (B) or 304 (B)	
BIOCHEM 501 (P)	

Biocore Subset	Foundation (21-22 cr.)
BIOCORE 301 (B) and 303 (B) and 323	. ,
(B) and 333 (B) and two of the following	Econ or Ag & Applied Econ
labs:	One course required from: A A E 215
BIOCORE 302 (b, B), 304 (b, B), 324	(r, S), ECON 101 (r, S), 111 (r, S)
(B)	* AAE 215 only carries QR-B credit if taken
	Fall 2011 or later.
Physics (4-5 cr.)	Tall 2011 of fater.
	Dialogical/Dhysical Colones
Must complete second semester of General	Biological/Physical Science
Physics.	NUTR SCI 332 (B)
PHYSICS 104 (P) or 202 (P) or 208 (P)	Accounting
	ACCT I S 100 or 300 (r)
Foundation (6 cr.)	
	Marketing, Personnel Management
Econ or Ag & Applied Econ	MARKETING 300 (S)
3 credits required from: A A E 215 (r,	M H R 300 (S) or 305 (S)
S), 323 (S), 336, ECON 101 (r, S), 111 (r, S)	
* AAE 215 only carries QR-B credit if taken	Business or Ag & Applied Econ
Fall 2011 or later.	6 credits required from: ACCT I S 211,
	301, 302, A A E 320, 322 (S), 323 (S), 336,
Biological/Physical Science	419, 420, 421 (S), 426, 474 (S), 577 (S),
NUTR SCI 510 (B) or 332 (B)	FINANCE 300 (S), GEN BUS 301, 302, INTL
	BUS 200 (S), MARKETING 305, 310, 420 (S),
	460, 635, 640, M H R 300 (S), 420, 422, 612,
	OTM 300, RMI 300, TRAN P U 325 (S), 630
	(S)
<u>Core</u> (32-33 cr.)	
FOOD SCI 301	
AN SCI/FOOD SCI 321	
FOOD SCI/MICROBIO 324 (B)	
FOOD SCI/MICROBIO 325 (B)	
FOOD SCI 410 (B)	
FOOD SCI 412	
FOOD SCI 432	
FOOD SCI 440 (B)	
FOOD SCI 514 (B)	
FOOD SCI 532	
` ' '	ed from one Integrated Food Product Elective:
FOOD SCI 511, 515, 535	
<u>Capstone</u> (3 cr.)	
FOOD SCI 602	
FOOD SCI 603 (b)	

#### **Log of Changes**

6/6/12: Added Comm-B designation to FOOD SCI 603 (capstone course) (MS)

9/20/2012: Changed AAE 215 (add 'r") to reflect policy allowing course to satisfy quantitative reasoning requirement. AAE 215 only carries QR-B credit if taken Fall 2011 or later. (DS)

This version was last updated on: 9/20/2012



These requirements were last reviewed by the CALS Curriculum Committee in 2010-11 and must undergo their next review by 2014-15.

#### Curriculum Sheet Bachelor of Science Degree Food Science Major

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120 credits Minimum number of degree credits necessary for graduation.	
Minimum 2.0 Cumulative GPA	
Last 30 Credits in Residence	
	· ·
<u>UW Requirements</u>	
Courses may not double count within university requirements, but courses counted toward	
university requirements may also be used to satisfy a college requirement &/or a major requirement.	
requirement.	
Communication Part A (2-3 cr.) Designated "a" in the Course Guide.	· ·
Communication Part B (2-3 cr.) Designated "b" in the Course Guide.	
Quantitative Reasoning Part A (3 cr.) Designated "q" in the Course Guide.	
Quantitative Reasoning Part B (3 cr.) Designated "r" in the Course Guide.	
Ethnic Studies (3 cr.) Designated "e" in the Course Guide.	
Humanities/Literature/Arts (6 cr.) Designated H, L, X, or Z in the Course Guide.	
Social Sciences (3 cr.) Designated S, W, Y, or Z in the Course Guide.	
CALS Requirements	
Courses may not double count within college requirements, but courses counted toward	
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requirement.	
First-Year Seminar (1 cr.) See DARS for full list.	· ·
Students who transfer into CALS after freshman year and continuing students who	
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International Studies (3 cr.) List of eligible International Studies courses can be found	
at:	
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Physical Science Fundamentals (3 cr.) Must complete one General Chemistry course	
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Biological Science (5 cr.) Designated B or Y in the Course Guide.	
Additional Science (3 cr.) Designated B, P, N, W, X, or Y in the Course GuideScience Breadth (3 cr.) Designated B, P, N, S, W, X, or Y in the Course Guide.	
Science breatin (3 ci.) Designated b, F, N, 3, W, A, or F in the Course duide.	

Possible Overlaps Between UW, CALS, & Major Requirements	
Communication Part B	
Quantitative Reasoning Part A	
Quantitative Reasoning Part B	
Social Sciences	
Physical Science Fundamentals	
Biological Science	
Additional Science	
Science Breadth	
Food Calcara Marian Douglasmants	
Food Science Major Requirements	
Courses may not double count within the major (unless specifically noted otherwise), but	
courses counted toward the major requirements may also be used to satisfy a university	
requirement &/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere.	
the major that are not used eisewhere.	
NUTR SCI 350 is recommended to fulfill the CALS International Studies requirement.	
Mathamatica and Chatistics (O as)	
Mathematics and Statistics (8 cr.)	
This major requires calculus. Prerequisites may need to be taken before enrollment in	
calculus. Refer to the Course Guide for information about calculus prereqs.	
MATH 211 (r) or 217* (r) or 221 (r)	
STAT 224 (r) or 301 (r) or 371** (r)	
*MATH 217 requires MATH 171 as a prerequisite.	
**STAT 371 recommended.	
STAT STET COMMENCE.	
Chemistry (5-9 cr.)	
CHEM 103 (P) and 104 (P) or CHEM 109 (r, P)	
CHEM 343 (P) and 344 (P) and 345 (P)	
Physics (4-5 cr.)	
<u>Physics</u> (4-5 cr.) PHYSICS 103 (r, P) or 201 (r, P) or 207 (r, P)	
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PHYSICS 103 (r, P) or 201 (r, P) or 207 (r, P)  Biology (16-18 cr.)	
PHYSICS 103 (r, P) or 201 (r, P) or 207 (r, P)	
PHYSICS 103 (r, P) or 201 (r, P) or 207 (r, P)  Biology (16-18 cr.) One of the following subsets:	
PHYSICS 103 (r, P) or 201 (r, P) or 207 (r, P)  Biology (16-18 cr.) One of the following subsets:  Biochem/Bot/Microbio/Zoo Subset	
PHYSICS 103 (r, P) or 201 (r, P) or 207 (r, P)  Biology (16-18 cr.) One of the following subsets:  Biochem/Bot/Microbio/Zoo SubsetOne of the following sets:	
Biology (16-18 cr.) One of the following subsets:  Biochem/Bot/Microbio/Zoo Subset One of the following sets: BIOLOGY/BOTANY/ZOOLOGY 151 (B) and 152 (b, B)	
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Biology (16-18 cr.) One of the following subsets:  Biochem/Bot/Microbio/Zoo Subset  One of the following sets:  BIOLOGY/BOTANY/ZOOLOGY 151 (B) and 152 (b, B)  BOTANY 130 (B) and ZOOLOGY 101 (B) and 102 (B)  MICROBIO 101 (B) or 303 (B)	
Biology (16-18 cr.) One of the following subsets:  Biochem/Bot/Microbio/Zoo Subset  One of the following sets:  BIOLOGY/BOTANY/ZOOLOGY 151 (B) and 152 (b, B) BOTANY 130 (B) and ZOOLOGY 101 (B) and 102 (B)  MICROBIO 101 (B) or 303 (B)  MICROBIO 102 (B) or 304 (B)	
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Biology (16-18 cr.) One of the following subsets:  Biochem/Bot/Microbio/Zoo Subset  One of the following sets:  BIOLOGY/BOTANY/ZOOLOGY 151 (B) and 152 (b, B)  BOTANY 130 (B) and ZOOLOGY 101 (B) and 102 (B)  MICROBIO 101 (B) or 303 (B)  MICROBIO 102 (B) or 304 (B)  BIOCHEM 501 (P)  Biocore Subset	
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Biology (16-18 cr.) One of the following subsets:  Biochem/Bot/Microbio/Zoo Subset  One of the following sets:  BIOLOGY/BOTANY/ZOOLOGY 151 (B) and 152 (b, B)  BOTANY 130 (B) and ZOOLOGY 101 (B) and 102 (B)  MICROBIO 101 (B) or 303 (B)  MICROBIO 102 (B) or 304 (B)  BIOCHEM 501 (P)  Biocore Subset	

Foundation (6 cr.)	
Econ or Ag & Applied Econ3 credits required from: A A E 215 (S), 323 (S), 336, ECON 101 (r, S), 111 (r, S)	
Biological/Physical ScienceNUTR SCI 510 (B) or 332 (B)	
Core (32-33 cr.)  FOOD SCI 301  AN SCI/FOOD SCI 321  FOOD SCI/MICROBIO 324 (B)  FOOD SCI 410 (B)  FOOD SCI 412  FOOD SCI 432  FOOD SCI 440 (B)  FOOD SCI 534  One course (2 credits minimum) required from one Integrated Food Product Elective FOOD SCI 511, 515, 535  Science elective: 3 credits required from the following list: Physics 104, FS 610, FS 642, FS 375/875 Food Physics, Chem 511, Chem 565, any science class >500 with P designation.	e:
<u>Capstone</u> (3 cr.)FOOD SCI 602 FOOD SCI 603	