

B.S. Food Science – use for new Fall 2013 students

**University Core Requirements (UCORE):**

34 Credit minimum required, with no more than three, three-credit courses within the major.

First Year Experience (3 credits)	Credits	Term	Grade	Offered
History 105	3			F, S, SS

Foundational Competencies (9 Credits minimum)	Credits	Term	Grade	Offered
<i>Written Communication (3)</i>				
English 101: Intro Writing or English 105:Comp for ESL	3			F, S, SS
<i>Communication (3)</i>				
H D 205 or COM 102	3 - 4			F, S, SS
<i>Quantitative Reasoning (3)</i>				
Math 140: Calculus for Life Scientists or Math 171 Calculus I	4			F, S, SS

Ways of Knowing (16 credits minimum)	Credits	Term	Grade	Offered
<i>Inquiry in the Social Sciences [SSCI](3)</i>				
EconS 101: Fundamentals of Microeconomics	3			F, S, SS
<i>Inquiry in the Humanities [HUM](3)</i>				
Elective	3			F, S, SS
<i>Inquiry in Creative and Professional Arts[ARTS] (3)</i>				
Elective	3			F, S, SS
<i>Inquiry in the Natural Sciences [BSCI] [PSCI] [SCI](7 minimum)</i>				
Major requirements: Biology 107: Intro to Cell Bio & Genetics	4			F, S, SS
Major requirements: Chem 105: Princ. of Chem I	4			F, S, SS
Major requirements: Chem 106: Princ. of Chem II	4			F, S, SS

Integrative and Applied Learning (6 credits minimum)	Credits	Term	Grade	Offered
<i>Global Diversity [DIVR](3)</i>				
	3			F,S,SS
<i>Integrative Capstone [CAPS](3)</i>				
	3			F,S,SS

**Food Science Core Requirements: 22 credits**

Course	Credits	Term	Grade	Offered
Math 140: Calculus for Life Scientists or Math 171 Calculus I	4			F, S,SS
Chem 345: Organic Chemistry	4			F, S,SS
Physics 101: General Physics	4			F, S,SS
Mbios 303: Intro Biochemistry	4			F, S,SS
Mbios 305: General Microbiology	3			F, S,SS
Mbios 304: Microbiology and Molecular Biology Lab	3			F,S,SS
Stat 212: Intro to Statistical Methods	4			F,S,SS
Complete Writing Portfolio				

**Food Science Major Requirements (56 credits)**

Course	Credits	Term	Grade	Offered
FS 110: Intro to Food Science	3			F,S
FS 220: Food Safety and Quality	3			S
Anim Sci 314: Prin of Nutr or Mbios 233 Human Nutrition	3			F,S
FS 303: Food Processing	3			F
FS 416: Food Microbiology	3			F
FS 417: Food Microbiology	2			F
FS 422: Sensory Evaluation of Food & Wine	3			S
FS 423: Sensory Evaluation of Food & Wine Lab	1			S
FS 432: Food Engineering	3			S
FS 433: Food Engineering	1			S
FS 460: Food Chemistry	3			F
FS 461: Food Chemistry Lab	1			F
FS 418: Seminar in Food Science	1			S
FS 462: Food Analysis	3			S
FS 470: Adv. Food Technology	3			S
FS 489: Food Product Development	3			s
**Food Science Electives [16 credits depending on UCORE courses selected]				
	3			F,S,SS
	3			F,S,SS
	3			F,S,SS
	3			F,S,SS
	4			F,S,SS

**CHECK LIST**

Writing in the Major (6 Credits [M] Courses) FS 303 & FS 461		
Writing Portfolio/Writing Exam		
UCORE with FS Core reqs and pre-reqs included	47-48 credits	
FS Core	22 credits	
FS Major	40 credits	
Open Electives	16credits	
40 upper-division credits	40	
Total (at least 120 credits)		

**NOTES:**

\*A grade of C or better must be earned in all major requirements. Major courses where less than a C is earned must be repeated.

\*\*Electives are to be used towards a minor or approved classes from advisor. Suggested minors could be in Business, Horticulture, Economics, Agribusiness Economics, Environmental and Resource Economics, Sustainable Development, Communications, Animal Sciences, Crop Science, Foreign Language, etc. Elective credits can be chosen from upper-division courses in chemistry, microbiology, biochemistry, agriculture (horticulture, crops, soils, IPS), statistics, scientific writing, viticulture and enology, internship, etc. See department for more information on courses for your minor interest.

# FOUR-YEAR PLAN

	Fall Semester	Hours	Spring Semester	HOURS
<b>First Year</b>	CHEM 105 (UCORE) (UCORE) Engl 101 (UCORE) Math 140 or Math 171	4 3 3 4	Biology 107 CHEM 106((UCORE) FS 110 (UCORE)	4 4 3 3
<b>Second Year</b>	(UCORE) Chem 345 EconS (UCORE) FS 220 Physics 101	3 4 3 3 4	Anim_Sci 314 or Biology 233 HD 205 or COMST 102 (UCORE) MBios 303 MBios 305 MBios 304 Complete Writing Portfolio	3 3-4 4 3 3
<b>Third Year</b>	(UCORE) FS 303 FS 416 FS 417 Stat 212 (UCORE) Electives	3 3 3 2 4 3	FS 422 FS 423 FS 432 FS 433 (UCORE) Electives	3 1 3 1 3 3
<b>Summer Session</b>				
<b>Fourth Year</b>	FS 460 FS 461 (UCORE) Elective	3 1 3 6	FS 418 FS 462 FS 470 FS 489 Electives	1 4 3 3 4