

FOOD SCIENCE & INDUSTRY

Science Option

(Curriculum works for Pre-Vet and Pre-Med students)

KANSAS STATE UNIVERSITY

College of Agriculture



Fall 2016

Spring 2017

NAME _____

ID # _____

****126 Total Hours for Graduation — 45 hours must be at the 300 level or above****

COMMUNICATIONS (10-12 hrs)

1,2,3	ENGL	100	Expository Writing I	3
1,2,3	ENGL	200	Expository Writing II	3
Select one:				
1,2,3	COMM	105	Public Speaking IA	2
1,2,3	COMM	106	Public Speaking I	3

One additional course in communications (2-3 hrs)

SOCIAL SCIENCES & HUMANITIES (12 hrs)

1,2,3	ECON	110	Prin Macro Economics	3
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QUANTITATIVE STUDIES (10 hrs)

1,2,3	MATH	220	Anal Geometry & Calc I	4
Select one:				
1,2,3	STAT	325	Intro to Statistics	3
1,2,	STAT	340	Biometrics	3
1,2,3	STAT	350	Business & Econ Stat I	3
Select one:				
2	STAT	341	Biometrics II	3
1,2,3	STAT	351	Business & Econ Stat II	3

BIOLOGICAL SCIENCES (8 hrs)

1,2,3	BIOL	198	Principles of Biology	4
1,2	BIOL	455	General Microbiology	4

PHYSICAL SCIENCES (22-23 hrs)

1,2,3	CHM	210	Chemistry I	4
1,2,3	CHM	230	Chemistry II	4
1,2,3	CHM	350	Gen Organic Chem	3
1,2,3	CHM	351	Gen Organic Chem Lab	2
1,2,3	BIOCH	521	Gen Biochemistry	3
1,2,3	BIOCH	522	Gen Biochemistry Lab	2
Select one:				
1,2,3	PHYS	113	General Physics I	4
2	PHYS	115	Descriptive Physics	5

CORE FOOD SCIENCE COURSES (31-33 hrs)

(Must have 2.0 GPA average in core food science courses)

1	FDSCI	101	Foundations in Food Science	1
-OR-				
1,2	GENAG	200	Top/College Careers	0
1,2	FDSCI	302	Intro Food Science	3
2	FDSCI	305	Fund of Food Processing	3
1	FDSCI	500	Food Science Seminar (Sr only)	1
2	FDSCI	501	Food Chemistry	3
1	FDSCI	600	Food Microbiology	2
1	FDSCI	601	Food Microbiology Lab	2
1	FDSCI	690	Principles of HACCP and HARPC	3
1	FDSCI	727	Chemical Mthd of Food Analysis	2
1	FDSCI	728	Physical Mthd of Food Analysis	2
2	GRSC	540	Eng App to Grain/Food Products	3
2	GRSC	541	Eng App to Grn/Fd Products Lab	1
Select one:				
1,2,3	FNDH	132	Basic Nutrition	3
1,2	ASI	318	Fundamentals of Nutrition	3
Select one:				
1	FDSCI	695	Quality Assurance Food Prod	3
1	FDSCI	740	R&D Food Product Development	4

PROCESSING ELECTIVES (8 hrs)^a

(Must have 8 hrs. processing electives from at least 2 commodity areas - Dairy, Grain, Meat, or Fruit/Vegetables):

PROFESSIONAL ELECTIVES (12 hrs)^a

K-STATE 8 REQUIREMENTS

Each student must successfully complete courses to cover all of the K-State 8 areas.



a = See Professional Electives Course List
1 = Fall 2 = Spring 3 = Summer

SOCIAL SCIENCES & HUMANITIES (12 hrs)

ECON 110 Principles of Macroeconomics

Select 9 credit hours (Suggested courses must be taken from more than one department.):

- Anthropology - Any course
- Architecture – ARCH 301 Appreciation of Architecture
- Art - Any course
- Communications - Any course
- Dance - Any course
- Economics - Any course between ECON 120 and ECON 735
- English - Any course **excluding ENGL 100** Expos Writing I and **ENGL 200** Expos Writing II
- Family Studies and Human Services - Any course
- Geography - Any course **excluding GEOG 221**
- History - Any course
- Music - Any course
- Philosophy - Any course
- Political Science - Any course
- Psychology - Any course
- Social Work - Any course
- Sociology - Any course
- Theatre - Any course
- Women Studies – WOMST 105 Intro to Women’s Studies

PROFESSIONAL ELECTIVES

<u>PROCESSING ELECTIVES</u>				<u>SPECIALIZATION ELECTIVES</u>				
1	ASI	310	Poultry Products Evaluation	2	1,2,3	ACCTG 231	Accounting Business Operations	3
1,2	ASI	350	Meat Science	3	1,2,3	ACCTG 241	Accounting Investing & Financing	3
1,2	ASI	361	Meat Animal Processing	2	1,2	AGEC 120	Ag Econ & Agribusiness	- OR - 3
1	ASI	370	Principles of Meat Evaluation	2	1,2,3	ECON 120	Prin Micro Economics	3
1	ASI	405	Fundamentals of Milk Processing	3	1,2	AGEC	Any course 200 level or above	
1	ASI	495	Advanced Meat Evaluation	2	1	AGRON 335	Environmental Quality	3
2	ASI	608	Dairy Food Processing & Technology	3	1,2	ASI	Any course 200 level or above	
2	ASI	610	Processed Meat Operations	2	1	ATM 160	Intro Ag Systems & Technology	3
2EY	ASI	640	Poultry Products Technology	3	2	ATM 450	Sensors/Control Ag Biol Systems	3
1	ASI	671	Meat Selection and Utilization	2	1,2	BIOL	Any course 300 level or above	
2	ASI	777	Meat Technology	3	1,2,3	CHM	Any course 300 level or above	
1,2,3	FDSCI	660	International Study Experience Food Sci	3	1,2,3	CIS	Any course between CIS 101 and CIS 105	1
1,2	GRSC	101	Intro to Grain Science and Industry	3	1,2,3	ECON 510	Intermediate Macro Economics	3
1,2	GRSC	150	Principles of Milling	2	1,2,3	ECON 520	Intermediate Micro Economics	3
1,2	GRSC	151	Principles of Milling Lab	1	1,2	FDSCI	Any course 400 level or above	
1	GRSC	405	Grain Analysis Techniques	2	1,2,3	FINAN 450	Principles of Finance	3
1,2	GRSC	602	Cereal Science	3	2	GENAG 210	Human & Cultural Diversity in Ag Sciences	3
1	GRSC	625	Flour and Dough Testing	3	1,2,3	GENAG 505	Comparative Agriculture	1-4
1	GRSC	635	Baking Science I	2	1	GENAG 711	Occupational and Agricultural Health	3
1	GRSC	636	Baking Science I Lab	2	2	GENAG 721	Occupational and Ag Safety and Health	3
2	GRSC	637	Baking Science II	3	1,2	GNHE 310	Human Needs	3
2	GRSC	638	Baking Science II Lab	1	1,2	GRSC	Any course	
1	GRSC	645	Pet Food Processing	3	2	HM 220	Environmental Issues in Hospitality	3
1	GRSC	646	Pet Food Processing Lab	1	1,2	HM 341	Principles of Food Production Mngmt	3
1EY	HORT	325	Introduction to Organic Farming	2	1,2	HM 442	Introduction to Wines	1
					1,2	FNDH	Any course 300 level or above	
					2	HORT 780	Health Promoting Phytochemicals	2
					1,2	KIN 360	Anatomy and Physiology	8
					1,2	LEAD 212	Intro to Leadership Concepts	2-3
1,2	AGCOM 400	Ag Business Communications	3	1,2,3	MANGT	Any course 300 level or above		
1	AGCOM 590	New Media Technology	3	1,2,3	MKTG	Any course 400 level or above		
2	AGCOM 610	Crisis Communication	3	1,2,3	PHYS 114	General Physics II		4
1	ASI 495	Advanced Meat Evaluation	2					
1,2	COMM 311	Bus and Professional Speaking	3					
1,2	COMM 321	Public Speaking II	3					
1,2,3	COMM 322	Interpersonal Communication	3					
1,2,3	COMM 326	Small Group Discussion Methods	3					
2	COMM 535	Communication Leadership	3					
1,2,3	ENGL 417	Written Communication for Workplace	3					
1,2,3	ENGL 510	Intro to Professional Writing	3					
1,2	ENGL 516	Written Communication for Sciences	3					
1	HM 643	Food Writing	3					
1,2	MKTG 542	Professional Selling and Sales	3					
		ANY FOREIGN LANGUAGE	3-5					

1= FALL 2= SPRING 3= SUMMER AY= Alternate yrs. OY= Odd yrs. EY= Even yrs.
Other professional electives can be substituted as appropriate by checking with the Chair of the FDSCI program.