



**Bachelor of Science in Agriculture, Food and Environmental Sciences**

**Major: Dairy Manufacturing**

**2018-2019 Sample 4-Year Plan**

**Total Degree Requirements: 120 credits**

Student \_\_\_\_\_ Student ID# \_\_\_\_\_ Student Phone # \_\_\_\_\_

Advisor \_\_\_\_\_ Minimum GPA \_\_\_\_\_ Minor/Career Interest(s) \_\_\_\_\_

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the [Undergraduate Catalog](#).

**First Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CHEM 106-106L or CHEM 112-112L	Chemistry Survey and Lab (SGR #6) or General Chemistry I and Lab (SGR #6)	p. MATH 102 or higher	4		
DS 119	First Year Seminar - Dairy and Food Science		2	F	
DS 130-130L	Introduction to Dairy Science and Lab		3	F/S	
ENGL 101 or SPCM 101	Composition I (SGR #1) or Fundamentals of Speech (SGR #2)	p. Placement	3		
MATH 102 or MATH 115	College Algebra Precalculus (SGR #5)	p. Placement p. MATH 102	3		
<b>Total Credit Hours</b>			15		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CHEM 108-108L	Organic and Biochemistry and Lab	p. CHEM 106/L or CHEM 112/L	5		
DS 496	Field Experience		3		
SGR #3	Social Science/Diversity		3		
SGR #4	Arts and Humanities/Diversity		3		
SPCM 101 or ENGL 101	Fundamentals of Speech (SGR #2) or Composition I (SGR #1)		3		
<b>Total Credit Hours</b>			17		

**Second Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BIOL 101-101L or BIOL 151-151L	Biology Survey I and Lab (3 cr) (SGR #6) or General Biology I and Lab (4 cr) (SGR #6)	BIOL 151/L preferred	3 - 4		
DS 202	Dairy Products Judging		1	F	
ENGL 201	Composition II (SGR #1)	p. ENGL 101	3		
FS	Food Science elective	p. FS 251 suggested	3	F	
PHYS 101-101L or PHYS 111-111L or PHYS 211-211L	Survey of Physics and Lab or Introduction to Physics I and Lab or University Physics I and Lab	p. MATH 102 or higher p. MATH 123 or MATH 125	4		
<b>Total Credit Hours</b>			14 - 15		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ACCT 210	Principles of Accounting I		3		
BIOL 103-103L or BIOL 153-153L	Biology Survey II and Lab (3 cr) or General Biology II and Lab (4 cr)	p. BIOL 101/L or BIOL 151/L BIOL 153/L Preferred	3 - 4		
ECON 201 or ECON 202	Principles of Microeconomics or Principles of Macroeconomics (SGR #3)		3		
MICR 231-231L	General Microbiology and Lab	p. CHEM 106/L or CHEM 112/L	4		
SGR #4	Arts and Humanities/Diversity		3		
<b>Total Credit Hours</b>			16 - 17		

**Information Subject to Change. This is not a contract.**

p. = Course Prerequisite  
Semester: F = Fall, S = Spring, SU = Summer



**Third Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
DS 400-400L	Dairy Chemistry and Analysis and Lab	p. DS 130 and CHEM 106/L or CHEM 112/L; CHEM 108	5	F	
DS 421-421L	Dairy Plant Management and Lab	p. Jr Standing	4	F even	
MICR 311-311L	Food Microbiology and Lab	p. MICR 231/L or MICR 233/L	4	F	
<b>Total Credit Hours</b>			13		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
DS 301-301L	Dairy Microbiology and Lab	p. MICR 231/L or MICR 233/L	4	S odd	
Group 1 course	Ag elective		3		
Business Elective	Select from ACCT, BADM, BLAW, ENTR, DSCI, FIN, HRM, MGMT, MKTG, or STAT prefix	Excludes courses completed as a program requirement	3		
General Elective	Select from any discipline		3		
General Elective	Select from any discipline		2		
<b>Total Credit Hours</b>			15		

**Summer**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
DS 494 or DS 498	Internship or Undergraduate Research/Scholarship	2 <sup>nd</sup> and/or 3 <sup>rd</sup> summer	3		
<b>Total Credit Hours</b>			3		

**Fourth Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AST 443-443L	Food Processing and Engineering Fundamentals and Lab		3	F	
DS 321-321L	Dairy Products Processing I and Lab	p. DS 130 and MICR 231/L or MICR 233/L	5	F odd	
DS 490	Seminar		1	F	
General Elective	Select from any discipline		3		
General Elective	Select from any discipline		3		
<b>Total Credit Hours</b>			15		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
DS 322-322L	Dairy Product Processing II and Lab	p. DS 130 and MICR 231/L or MICR 233/L	5	S even	
Group 1 course	Ag elective		1 - 3		
General Elective	Select from any discipline		3		
General Elective	Select from any discipline to reach minimum of 120 total credits		3		
<b>Total Credit Hours</b>			12 - 14		

**Comments/Notes**

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the [Honors program requirements](#).

The exact number of general elective credits is dependent on choice of Biology sequence and choice of Group 1 courses.