

**B.S. Agricultural Science
Dairy Science Major (247)
Production Systems Concentration (ASP)**

This guide to course selection and sequence is designed to assist students with forward planning. This is only one of many possible sequences depending on students' individual interests and talents. This is not an official listing of degree requirements; those are listed on the corresponding curriculum sheet.

Abbreviations:

AAE - Agricultural and Applied Economics	P - Prerequisites
AHABS - Animal Health & Biomedical Sci.	F - Fall Semester
BSE - Biological Systems Engineering	S - Spring Semester
DS - Dairy Science	Su - Summer

<u>Credits</u>	<u>Sem</u>	<u>Courses</u>
Semester 1		
3-5	F/S	Math 112 (Algebra) [P: Math placement scores]
4	F/S	Chem. 103 - General Chemistry [P: Math 112 or 114 before Chem.]
4	F	Dairy Sci. 101 - Livestock Production
3	F/S	Written communications/ Communications A [P: Placement scores]
3-4	F/S	Humanities elective or Foreign language ¹ [P: Placement scores]
17.20		Total
Semester 2		
4-5	F/S	Chem. 103 or 104 - General Chemistry [P for Chem. 104: Chem. 103]
3-5	F/S	Math 210 (Finite Math) or Math 211 (Calculus) [P: Math placement scores]
2-3	S	Dairy Sci 205 ¹ (Dairy Cattle Selection) or AAE 215
3	F/S	Ethnic studies/ Humanities/ International studies/ Social studies elective
5	F/S	Zoology 101 & 102 – Animal Biology
15-16		Total
Semester 3		
1	F	Dairy Science 272 ¹ – Pre-Capstone Seminar
1	F	Dairy Science 375 ¹ – Special Topics
5	F/S	Chem. 104 – General Chemistry [P: Chem. 103]
3	F/S	AAE 215 - Introduction to Agricultural and Applied Economics / Elective
4	F	Agronomy 100 ¹ – Principles of Crop Prod. or Agric. Sci. elective
3	F	Genetics 160- Heredity
17		Total
Semester 4		
1	S	Dairy Science 375 ¹ – Special Topics
3	S	BSE 210 ¹ – Livestock Housing/Waste Management or Agric. Sci elective
2	S	Dairy Sci. 302 ¹ – Dairy Cattle Husbandry
3	F/S	Statistics 371 - Applied Statistics for Life Sciences [P: Math 114]
3	S	Spoken communications/ Communications B
3	F/S	Ethnic studies/ Humanities/ International studies/ Social studies elective
16		Total
Summer		
1	Su	Elective, e.g., Dairy Sci 375 Mexico Study Tour.
Semester 5		
3	S	Dairy Sci. 434 – Reproductive Physiology [P: Jr.st., DS 101 or Zool. 101]
3	F/S	Accounting 300 ¹ – Accounting Principles [P: Jr. Standing]
3	F	Bmolchem 314 – Introduction to Human Biochemistry [P: Chem 104 or 108]
1	F	Dairy Sci. 313 - Animal Feeds and Diet Formulation [P: DS 311]
6-9	F/S	Ethnic studies/ Humanities/ International studies/ Social studies elective
15-18		Total

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Semester 6		
3	S	AAE 320 - Farming Systems Management [P: AAE 215]
2	S	Dairy Sci. 361 – Intro. To Animal & Vet. Genetics [P: Genetics & Statistics]
2	S	Dairy Sci. 362 or 363 – Vet. Genetics or Animal Breeding [P: DS 361]
3	F	Dairy Sci. 311 – Comparative Animal Nutrition [P: BMOLCHEM 314]
1	F	Dairy Sci. 313 – Animal Feeds and Diet Formulation [P: DS 311][
3	S	Dairy Sci. 433 - Dairy Herd Management [P: Dairy Sci. 101]
3		Electives
14-17		Total
Summer		
1-3	F/S/Su	Dairy Sci. 399 - Internship in any CALS Department [P: Soph., junior, or Senior Standing]
Semester 7		
3	F	AAE 419 ¹ – Agricultural Finance [P: AAE 320]
2	F	Dairy Sci. 305 -- Lactation [P: BIOCHEM 501 or BMOLCHEM 314]
2	F	Dairy Sci 414 – Ruminant Nutrition [P: DS 311 & 313]
1	F	Dairy Sci 690 - Proseminar [P: Sr. standing]
3-6	F/S	Production Agriculture Elective
3		Electives e.g. Dairy Sci 699
14-17		Total
Semester 8		
3	S	AAE 322 ¹ – Commodity Markets [P: AAE 215]
3	S	Dairy Sci. 535 - Dairy Management Practicum - [P: DS361,433, 434]
9		Electives e.g. Dairy Sci 468 or Dairy Sci 699
15		Total

Footnote:

¹Recommended elective – not a required course, but may meet a general requirement**Recommended electives**

MHR – Management and Human Resources

OIM – Operations and Information Management

<u>Credits</u>	<u>Sem</u>	<u>Courses</u>
4	F	Agronomy 100, Principles and Practices of Crop Production
3	F	Agronomy 302, Forage Management and Utilization [P: Jr.St., Agron 100]
3	S	Agronomy 304, Grain Crops [P: Jr.St., Agron 100]
3	F	AAE 323, Cooperatives [P: Jr. St.]
3	S	AAE 336, Agricultural and Natural Resources Law [P: Jr. St.]
3	F	AAE 420, Production Economics [P: Econ 301]
3	F/S/Su	AAE 306, Real Estate Process [P: Jr.St., Econ 101 or AAE 215]
1-5	F/S	Dairy Sci. 299 - Independent Study
3	F	Dairy Sci. 370 - Livestck Prod. & Health in Agric. Developmnt [P: DS 101]
1	S	Dairy Sci. 375 – Agr in Emerging Economics: Dairying in Mexico Seminar
1	Su	Dairy Sci. 375 – Mexico Study Tour [P: DS 375 Spring seminar]
2	S	Dairy Sci. 468 – Environmental Management of Livestock Operations
1-5	F/S	Dairy Sci. 699 - Special Problems
3	S	MHR 422, Small Bus. Manag./Entrepreneursip; [P: Acct 100&212, Econ 101&102]
3	F/Su	OIM 330, Managerial Economics [P: Econ 101 and OIM 708]
3	F/Su	OIM 350, Management of Service & Manufacturing Operations [P: Stat.]
4	F/S	Soil Sci 301, General Soil Science [P: Math 112, Chem 103]
3	S	Soil Sci 326, Plant Nutrition Management [P: Agron 100, Soil Sci. 301]
1	F	Soil Sci 334, Nutrient Management: Agronomic Crops [P: Soil Sci 326]