

DASC: DBM

College of Agriculture & Life Sciences
Bachelor of Science
Dairy Science (DASC) Major
DBM Option

Date of Entry under UG Catalog **2023-2024**

Pathways to General Education and CALS Requirements [47 credits]

Concept 1 (9 credits)

1f – Foundational Discourse

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|-----------|--------------------|-----|
| ENGL 1105 | First Year Writing | [3] |
| ENGL 1106 | First Year Writing | [3] |

1a – Advanced/Applied Discourse

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| | | [3] |
|--|--|-----|

Concept 2 – Critical Thinking in the Humanities (6 credits)

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| | | [3] |
| | | [3] |

Concept 3 – Reasoning in the Social Sciences (6 credits)

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|------------------------------|---|-----|
| AAEC 1005 or ECON 2005 | Economics of the Food and Fiber System or Principles of Economics | [3] |
| AAEC 1006 or ECON 2006 | Economics of the Food and Fiber System or Principles of Economics (Pre: 2005) | [3] |

Concept 4 – Reasoning in the Natural Sciences (8 credits)

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| BIOL 1105 BIOL 1115 Or BIOL 1005 BIOL 1015 | Principles of Biology Principles of Biology Lab or General Biology General Biology Lab | [3] [1] |
| BIOL 1106 BIOL 1116 Or BIOL 1006 BIOL 1016 | Principles of Biology Principles of Biology Lab or General Biology General Biology Lab | [3] [1] |

Concept 5 (9 credits)

5f – Foundational Quantitative and Computational Thinking

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|---|---|-----|
| MATH 1014 or MATH 1025 or MATH 1225 | Precalculus with Transcendental Functions (3 credits) or Elementary Calculus (3 credits) or Calculus of a Single Variable (4 credits) | [3] |
| STAT 2004 Or STAT 3005 Or STAT 3615 | Introductory Statistics Pre: MATH 1014 or MATH 1025 or MATH 1225 or MATH 1524 or MATH 1525 Or Statistical Methods Pre: MATH 1205 or MATH 1225 Or Biological Statistics Pre: MATH 1205 or MATH 1525 or MATH 1225 or MATH 1025 or MATH 1524 or ISC 1104 | [3] |

5a – Advanced/Applied Quantitative and Computational Thinking

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|-----------------------|---|-----|
| ALS 3104 ¹ | Animal Breeding and Genetics PRE: BIOL 1105, (STAT 2004 or STAT 3005 or STAT 3615), (APSC 1454 or DASC 2474 or DASC 2484) (3 credits) | [3] |
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¹ “in major” GPA courses indicated

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Concept 6 (6 credits)

6a – Critique Practice in the Arts

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| | [3] |
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6d – Critique and Practice in Design

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| | [3] |
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Concept 7 – Critical Analysis of Identity and Equity in the United States (3 credits)

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| | [3] |
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Dairy Science Common Degree Core [27 credits]

| | | <i>Fall</i> | <i>Spring</i> |
|---|-------------------------------------|-------------|---------------|
| Chemistry Requirement | | | |
| CHEM 1015 | Chemistry in Context | [3] | |
| CHEM 1016 | Chemistry in Context | | [3] |
| or | | | |
| CHEM 1035 | General Chemistry | [3] | |
| CHEM 1036 | General Chemistry | | [3] |
| ALS 2304 ² Pre: BIOL 1106 | Animal Physiology and Anatomy | [4] | |
| ALS 3204 ² Pre: ALS 2304, (CHEM 1036 or CHEM 1036H or CHEM 1016) | Animal Nutrition and Feeding | [3] | |
| ALS 3304 ² Pre: ALS 2304 | Physiology of Reproduction | [3] | |
| DASC 2474 ² | Dairy Science and Industry | | [3] |
| DASC 2664 ² | Prof Discourse & Career Development | [1] | |
| DASC 3474 ² (Junior standing. Pre: DASC 2474) | Dairy Information Systems | [3] | |
| DASC 4374 ² (Pre: ALS 2304) | Physiology of Lactation | | [3] |
| DASC 4664 ² (Pre: DASC 2664) | Translating Dairy Science | [1] | |
| TOTAL GENERAL REQUIREMENT CREDITS | | | 74 |

Satisfactory Progress Toward Degree

- A. After completion of 30 Virginia Tech semester credits: 3 semester credits of DASC courses
- B. After completion of 36 semester credits¹: 12 semester credits in any area of the Pathways to General Education
- C. After completion of 72 semester credits¹: 24 semester credits in any area of the Pathways to General Education, 6 semester credits of DASC courses; at least 9 semester credits of in-major courses
- D. After 96 semester credits: In-major GPA of at least 2.00, Overall GPA of at least 2.00

2.00 minimum overall and in-major GPAs are required for graduation.

Prerequisite: Some courses listed on this checksheet may have prerequisites; please consult the University Course Catalog or check with your advisor.

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- 1** Includes credits completed at Virginia Tech, transfer credits, advanced placement & standing, credit by exam, and course withdrawal
 - 2** "in major" GPA courses indicated
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Student must have completed 2 years of High School Foreign Language OR 6 credits of University Foreign Language. Credits do not count towards graduation requirements.

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Department of Dairy Science
Bachelor of Science in Dairy Science

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Option Dairy Requirements [9 credits minimum]

| | | | |
|--|--|-----|-----|
| DASC 4475 ¹ (Pre: DASC 2474) | Dairy Enterprise Management | | [3] |
| DASC 4476 ¹ (Pre: DASC 3474, (DASC 4475 or AAEC 3454) | Dairy Enterprise Management | [3] | |
| Select at least 1 course (3 credits total) | | | |
| DASC/APSC 3134 ¹ | Animal Agriculture and the Environment | | [3] |
| DASC 3274 ¹ (Co: ALS 3204) | Applied Dairy Cattle Nutrition | [3] | |
| DASC 4174 ¹ (Pre: ALS 3104) | Applied Dairy Cattle Genetics | | [3] |

Dairy electives [minimum 8 credits]

| | | <i>Fall</i> | <i>Spring</i> |
|--|---|-------------|---------------|
| DASC 1464 ¹ | Dairy Cattle Handling | [1] | |
| DASC 1574 ¹ | Dairy Science First Year Experience | [1] | |
| DASC 2204 ¹ (Pre: AAEC 1005) | Entrepreneurship in Animal Agriculture | [3] | |
| DASC 2484 ¹ | Dairy Cattle Evaluation | | [2] |
| DASC/APSC 3134 ^{1,2} | Animal Agriculture and the Environment | | [3] |
| DASC 3274 ^{1,2} (Co: ALS 3204) | Applied Dairy Cattle Nutrition | [3] | |
| DASC 4174 ^{1,2} (Pre: ALS 3104) | Applied Dairy Cattle Genetics | | [3] |
| DASC 4274 ¹ (Co: DASC 3274) | Dairy Ration Formulation | [1] | |
| DASC/APSC 4304 ¹ (Pre: ALS 2304) | Bovine Reproduction Practices | [2] | |
| DASC 4474 ¹ (Pre: 3474, ALS 3204, ALS 3304. Co: 4475) | Advanced Dairy Management Evaluation | | [2] |
| DASC 4964 ¹ or 4974 ¹ or 4994 ¹ | Field study, Independent study or Undergraduate research (maximum of 3 credits) | [] | [] |

Option Business Requirements [9 credits minimum]

Any AAEC (except 1005, 1006), ACIS, ECON (except 2005, 2006), FIN, MGT, or MKTG.

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| | | [] | [] |

Option Restricted Electives [12 credits minimum]

Any AAEC, ACIS, ALS, APSC, BCHM, BIOL, BSE, CHEM, COMM, CS, CSES, DASC, ECON, ENT, FIW, FOR, FST, HNFE, HORT, MATH, MGT, MKTG, PHYS, SPAN, STAT, and BMVS courses (with advisor approval).

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| | | [] | [] |
| | | [] | [] |

Free Electives [Number needed to complete 120 credits]:

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| | | [] | [] |
| | | [] | [] |
| | | [] | [] |

MINIMUM DASC CREDITS REQUIRED FOR GRADUATION 20
TOTAL CREDITS REQUIRED FOR GRADUATION 120

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- 1 "in major" GPA courses indicated
 - 2 These courses (DASC/APSC 3134, DASC 3274, DASC 4174) can be used to meet Option requirements or count toward Dairy Electives, but not both.