SOUTH DAKOTA BOARD OF REGENTS

ACADEMIC AFFAIRS FORMS

Substantive Program Modification Form

| UNIVERSITY: | SDSU |
|-------------------------------|--|
| CURRENT PROGRAM TITLE: | Dairy Production (B.S.) |
| CIP CODE: | 01.0905 |
| UNIVERSITY DEPARTMENT: | Dairy & Food Science |
| UNIVERSITY DIVISION: | Agriculture, Food & Environmental Sciences |

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university

| роі | icy. | | | | | | |
|-------------|---|-------------|-------------------|----------------|-----------|--|--|
| • | Dennis D. Hedge | | | 10/14/ | /2018 | | |
| | Vice President of Academic Affairs | or | | Da | ite | | |
| | President of the University | | | | | | |
| 1. | This modification addresses a change in: | | | | | | |
| \boxtimes | Total credits required within the discipline | : 🗆 | Total credits of | supportive co | urse work | | |
| \boxtimes | Total credits of elective course work | \boxtimes | Total credits rec | quired for pro | gram | | |
| | Program name | | Existing special | ization | | | |
| | CIP Code | | Other (explain b | pelow) | | | |
| 2. | Effective date of change: 2019-2020 Academ | nic Year | • | | | | |
| 3. | Program Degree Level: Associate □ Bache | lor's ⊠ | Master's □ | Doctoral | | | |
| 4. | Category: Certificate □ Specialization □ | Mino | r □ Major | \boxtimes | | | |
| 5. | . If a name change is proposed, the change will occur: | | | | | | |
| | \square On the effective date for all students | | | | | | |
| | ☐ On the effective date for students new to the program (enrolled students will graduate from | | | | | | |
| | existing program) | 1 0 | | C | | | |
| 6. | Primary Aspects of the Modification: | | | | | | |

Existing Curriculum Proposed Curriculum (Highlight Changes)

| Existing Currentum | | 1 roposed Eurriculum (Highlight Changes) | | | |
|---|--------|--|--------|--|--|
| Pre Num Title | Cr Hrs | Pre Num Title | Cr Hrs | | |
| System General Education Requirements | 31-34 | System General Education Requirements | 31-34 | | |
| SGR 1 Written Communication | 6 | SGR 1 Written Communication | 6 | | |
| ENGL 101 Composition I (3) | | ENGL 101 Composition I (3) | | | |
| ENGL 201 Composition II (3) | | ENGL 201 Composition II (3) | | | |
| SGR 2 Oral Communication | 3 | SGR 2 Oral Communication | | | |
| SPCM 101 Fundamentals of Speech | | SPCM 101 Fundamentals of Speech | | | |
| SGR 3 Social Sciences/Diversity | 6 | SGR 3 Social Sciences/Diversity | | | |
| ECON 201 Microeconomics (3) or ECON 202 | | ECON 201 Microeconomics (3) or ECON 202 | | | |
| Macroeconomics (3) | | Macroeconomics (3) | | | |
| and an additional non ECON class | | and an additional non ECON class | | | |
| SGR 4 Arts and Humanities/Diversity | 6 | SGR 4 Arts and Humanities/Diversity | 6 | | |
| SGR 5 Mathematics | 3-5 | SGR 5 Mathematics | 3-5 | | |
| MATH 102 College Algebra (3) | | MATH 102 College Algebra (3) | | | |
| OR | | OR | | | |
| MATH 115 Precalculus (5) | | MATH 115 Precalculus (5) | | | |

Existing Curriculum (Highlight Changes)

| SGR 6 Natural Sciences | ~~~ | | Existing Curriculum | | ~~~ | | sea Curriculum (Highlight Changes) | 1 |
|--|---|------------|-------------------------------------|-----|---|----------------------|--|-----|
| CHIFM 112-112. General Chemistry & Lab (4) AND BIOL 101-1011. Biology Survey & Lab (3) BIOL 101-1011. Biology Survey & Lab (3) BIOL 101-1011. Biology Survey & Lab (4) BIOL 151-1511. General Biology & Lab (4) BIOL | | | | 7-8 | | | | 7-8 |
| BIOL 101-101L Biology Survey 1 & Lab (3) BIOL 101-101L Biology Survey 1 & Lab (3) OR BIOL 151-151L General Biology 1 & Lab (4) College Requirements 12 | CHEM 112-112L General Chemistry I & Lab (4) | | | | CHEM 112-112L General Chemistry I & Lab (4) | | | |
| OR OR College Requirements 12 College Requirements 12 College Requirements 13 College Requirements 14 College Requirements 15 College Requiremen | | | | | | | | |
| BIOL 151-151L General Biology I & Lab (4) | | | | | | | | |
| AGEC 271 Farm and Ranch Management 3 AGEC 271 Farm and Ranch Management 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Feeds and Feeding & Lab 3 AS 319-3191, Livestock Reproduction & | | 51-151L Ge | eneral Biology I & Lab (4) | | | | | |
| AS 319-319 Livestock Feeds and Feeding & Lab 3 3 3 3 3 3 3 3 3 | | | | 12 | College | College Requirements | | |
| DS | | | | | | | | |
| Namipr Requirements | | | | | | | | |
| Major Requirements | | | | | | | | |
| AS 333-333 Livestock Reproduction & Lab 3 AS 333-333 Livestock Reproduction & Lab 3 AS AS 219 Principles of Animal Nutrition 3 AS 463 Agricultural Waste Management 3 AS 463 Agricultural Waste Management 3 AS AS 463 Agricultural Waste Management 3 AS 464 AS 464 AS 465 Agricultural Waste Management 3 AS 463 Agricultural Waste Management 3 AS 464 AS AS 461 | | | | | | | | |
| AS 219 | | | | | | | | |
| AS/AST 463 Agricultural Waste Management 3 AST AST | | | | | | | | |
| BIOL 103-103L Biology Survey II & Lab (3) 3-4 BIOL OR BIOL 153-153L General Biology & Lab (4) BIOL Signature Signatur | | | | | | | | |
| OR 153-153L General Biology & Lab (4) BIOL 153-153L Generics (3) 3-4 BIOL 371 Genetics (3) 3-4 BIOL 371 Genetics (3) 3-4 Genetics (3) 3-4 Genetics (3) 3-5 Genetics (3) 3-4 Genetics (4) 4-4 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (3) 3-4 Genetics (4) 4-5 Genetics (3) 3-4 Genetics (4) 4-5 Gen | | | | | AST | | | |
| BIOL 371 Genetics (3) 3-4 BIOL 371 Genetics (3) 3-4 AS 332 Livestock Breeding and Genetics (4) AS AS 332 Livestock Breeding and Genetics (4) AS AS 332 Livestock Breeding and Genetics (4) AS AS AS AS AS AS AS A | OR | 103-103L | Biology Survey II & Lab (3) | 3-4 | | 103-103L | Biology Survey II & Lab (3) | 3-4 |
| OR AS 332 Livestock Breeding and Genetics (4) OR AS 332 Livestock Breeding and Genetics (4) CHEM 108-108L Organic and Biochemistry & Lab 5 CHEM 108-108L Organic and Biochemistry & Lab 5 DS 119 First Year Seminar – Dairy and Food Science 19 First Year Seminar – Dairy and Food Science 2 DS 202 Dairy Products Judging 1 DS 202 Dairy Products Judging 1 DS 311 Dairy Microbiology & Lab 4 DS 301-301L Dairy Microbiology & Lab 4 DS 312-312L Dairy Cattle Judging 2 DS 311 Dairy Cattle Judging 2 DS 312-312L Dairy Cattle Judging 2 DS 312-312L Dairy Cattle Breeding and Evaluation & Lab 4 MEDS 480-480L Dairy Farm Operations I & Lab 4 DS 481-481L Dairy Farm Operations I & Lab 4 DS 481-481L Dairy Farm Operations II & Lab 4 DS 481-481L Dairy Farm Operations I & Lab 4 DS 494 Internship 3 DS 494 Internship 3 | | | | | | | | |
| AS 332 Livestock Breeding and Genetics (4) CHEM 108-108L Organic and Biochemistry & Lab 5 CHEM 108-108L Organic and Biochemistry & Lab 2 Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L Organic and Biochemistry & Lab 4 DS Science 108-108L | | 371 | Genetics (3) | 3-4 | | 371 | Genetics (3) | 3-4 |
| CHEM 108-108L Organic and Biochemistry & Lab 5 CHEM 108-108L Organic and Biochemistry & Lab 5 | | 332 | Livestock Breeding and Genetics (4) | | | 332 | Livestock Breeding and Genetics (4) | |
| DS | | | | 5 | | | | 5 |
| DS 202 | | | First Year Seminar – Dairy and Food | | | | First Year Seminar – Dairy and Food | |
| DS 301-301L Dairy Microbiology & Lab 4 DS 301-301L Dairy Microbiology & Lab 4 DS 311 Dairy Cattle Judging 2 DS 311 Dairy Cattle Judging 2 DS 312-312L Dairy Cattle Breeding and Evaluation & Lab L | D.C. | 202 | | - | D.C. | 202 | | |
| DS 311 | DS | | | | | | | |
| DS 312-312L Dairy Cattle Breeding and Evaluation & Lab Lab Lab | DC | | | | | | | |
| State | DC | | | | | | | |
| DS | | | & Lab | 4 | | | Lab | |
| DS | | | | 3 | | | | |
| DS | | | | | | | | |
| DS 494 Internship 3 DS 494 Internship 3 DS 494 Internship 3 MICR 231-231L General Microbiology & Lab 4 MICR 231-231L General Microbiology & Lab 4 PHYS 101-101L Survey of Physics & Lab (4) 4 PHYS 101-101L Survey of Physics & Lab (4) 4 PHYS 101-101L Introduction to Physics & Lab (4) 4 PHYS 101-101L Introduction to Physics & Lab (4) 4 PHYS 111-111L Introduction to Physics & Lab (4) 4 PHYS 211-211L University Physics & Lab (4) PHYS 211-211L University Physics & Lab (4) PHYS 213-213L Soils and Lab (3) OR PS 213-213L Soils and Lab (3) OR PS 313 Forage Crop and Pasture Management (3) PS 313 Forage Crop and Pasture Management (3) PS 313 Forage Crop and Physiology of Domestic Animals & Lab VET 223-223L Anatomy and Physiology of Domestic Animals & Lab VET 403 Animal Disease and Their Control 3 VET 403 Animal Disease and Their Control 3 Selectives For Dairy Production (B.S.) System General Education Requirements 31-34 System General Education Requirements 12 College Requirements 12 College Requirements 12 Major Requirements 66-68 Major Requirements 5-10 Total number of hours required for major 67-69 | | | | | | | | |
| MICR 231-231L General Microbiology & Lab 4 MICR 231-231L General Microbiology & Lab 4 PHYS 101-101L Survey of Physics & Lab (4) 4 PHYS 101-101L Survey of Physics & Lab (4) 4 OR PHYS 111-111L Introduction to Physics & Lab (4) OR PHYS 111-111L Introduction to Physics & Lab (4) 4 OR PHYS 211-211L University Physics & Lab (4) OR PHYS 211-211L University Physics & Lab (4) 0R PS 213-213L Soils and Lab (3) 3 PS 213-213L Soils and Lab (3) 3 OR PS 313 Forage Crop and Pasture Management (3) PS 313 Forage Crop and Pasture Management (3) 3 VET 223-223L Anatomy and Physiology of Domestic Animals & Lab VET 223-223L Anatomy and Physiology of Domestic Animals & Lab 4 Animals & Lab 4 4 VET 403 Animal Disease and Their Control 3 VET 403 Animals & Lab 5-10 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | | | |
| PHYS | | | • | | | | | |
| OR PHYS 111-111L Introduction to Physics & Lab (4) OR PHYS 211-211L University Physics & Lab (4) OR PHYS 211-211L University Physics & Lab (4) OR PHYS 211-211L University Physics & Lab (4) OR PHYS 213-213L Soils and Lab (3) OR PS 313 Forage Crop and Pasture Management (3) OR PS 313 Forage Crop and Pa | | | | | | | | |
| OR PHYS 211-211L University Physics & Lab (4) PS 213-213L Soils and Lab (3) OR PS 313 Forage Crop and Pasture Management (3) VET 223-223L Anatomy and Physiology of Domestic Animals & Lab VET 403 Animal Disease and Their Control 3 Electives 6-11 Summary of Credits for Dairy Production (B.S.) System General Education Requirements 12 Major Requirements 66-68 Total number of hours required for major 66-68 OR PHYS 211-211L University Physics & Lab (4) PS 213-213L Soils and Lab (3) OR PS 313 Forage Crop and Pasture Management (3) VET 223-223L Anatomy and Physiology of Domestic Animals & Lab VET 403 Animal Disease and Their Control 3 Electives 5-10 Total number of hours required for major 66-68 Total number of hours required for major 67-69 | | 101-101L | Survey of Physics & Lab (4) | 4 | | 101-101L | Survey of Physics & Lab (4) | 4 |
| PHYS 211-211L University Physics & Lab (4) PS 213-213L Soils and Lab (3) OR PS 313 Forage Crop and Pasture Management (3) VET 223-223L Anatomy and Physiology of Domestic Animals & Lab VET 403 Animal Disease and Their Control 3 VET 403 Animal Disease and Their Control 3 Electives Summary of Credits for Dairy Production (B.S.) System General Education Requirements Summary of Credits for Dairy Production Requirements 12 Major Requirements Flectives Total number of hours required for major Total number of hours required for major PHYS 211-211L University Physics & Lab (4) PS 213-213L Soils and Lab (3) OR PS 313 Forage Crop and Pasture Management (3) PS 213-213L Soils and Lab (3) OR PS 313 Forage Crop and Pasture Management (3) PS 213-213L Soils and Lab (3) OR PS 213-213L Soils and Lab (2) Soils and Lab (3) OR PS 213-213L Soils and Lab (2) Soils and Lab (3) OR PS 213-213L Soils and Lab (2) Soils and Lab (3) OR PS 213-213L Soils and Lab (2) Soi | | 111-111L | Introduction to Physics & Lab (4) | | | 111-111L | Introduction to Physics & Lab (4) | |
| PS 213-213L Soils and Lab (3) 3 PS 213-213L Soils and Lab (3) 3 OR PS 313 Forage Crop and Pasture Management (3) Forage Crop and Pasture Management (3) PS 313 F | | 211-211L | University Physics & Lab (4) | | | 211-211L | University Physics & Lab (4) | |
| OR PS 313 Forage Crop and Pasture Management (3) VET 223-223L Anatomy and Physiology of Domestic Animals & Lab VET 403 Animal Disease and Their Control 3 VET 403 Animal Disease and Their Control 3 Electives 5-10 Summary of Credits for Dairy Production (B.S.) System General Education Requirements 12 College Requirements 12 Major Requirements 66-68 Electives 6-11 Electives 5-10 Total number of hours required for major 66-68 OR PS 313 Forage Crop and Pasture Management (3) VET 403 Anatomy and Physiology of Domestic 4 Animals & Lab VET 403 Animal Disease and Their Control 3 Electives 5-10 Summary of Credits for Dairy Production (B.S.) System General Education Requirements 12 College Requirements 12 Major Requirements 5-10 Total number of hours required for major 67-69 Total number of hours required for major 67-69 | | | | 3 | | | | 3 |
| PS 313 Forage Crop and Pasture Management (3) VET 223-223L Anatomy and Physiology of Domestic Animals & Lab VET 403 Animal Disease and Their Control 3 VET 403 Animal Disease and Their Control 3 Telectives Summary of Credits for Dairy Production (B.S.) System General Education Requirements 31-34 College Requirements 12 Major Requirements 66-68 Major Requirements 5-10 Total number of hours required for major 66-68 Total number of hours required for major 67-69 PS 313 Forage Crop and Pasture Management (3) | | | | | | | , , | |
| VET223-223LAnatomy and Physiology of Domestic4VET223-223LAnatomy and Physiology of Domestic4VET403Animals & LabVET403Animals & Lab3Electives6-11Electives5-10System General Education Requirements31-34System General Education Requirements31-34College Requirements12College Requirements12Major Requirements66-68Major Requirements67-69ElectivesTotal number of hours required for major67-69 | PS | 313 | 1 - | | PS | 313 | Forage Crop and Pasture Management (3) | |
| VET 403 Animal Disease and Their Control 3 VET 403 Animal Disease and Their Control 3 Electives 6-11 Electives 5-10 System General Education Requirements 31-34 System General Education Requirements 31-34 College Requirements 12 College Requirements 12 Major Requirements 66-68 Major Requirements 67-69 Electives 6-11 Electives 5-10 Total number of hours required for major 66-68 Total number of hours required for major 67-69 | VET | 223-223L | Anatomy and Physiology of Domestic | 4 | VET | 223-223L | | 4 |
| Electives5-10Summary of Credits for Dairy Production (B.S.)System General Education Requirements31-34System General Education Requirements31-34College Requirements12College Requirements12Major Requirements66-68Major Requirements67-69Electives6-11Electives5-10Total number of hours required for major66-68Total number of hours required for major67-69 | VET | 403 | | 3 | VET | 403 | | 3 |
| Summary of Credits for Dairy Production (B.S.)System General Education Requirements31-34System General Education Requirements31-34College Requirements12College Requirements12Major Requirements66-68Major Requirements67-69Electives6-11Electives5-10Total number of hours required for major66-68Total number of hours required for major67-69 | | | | | | <u> </u> | | |
| System General Education Requirements31-34System General Education Requirements31-34College Requirements12College Requirements12Major Requirements66-68Major Requirements67-69Electives6-11Electives5-10Total number of hours required for major66-68Total number of hours required for major67-69 | | | Summary of C | | | | n (B.S.) | - |
| College Requirements12College Requirements12Major Requirements66-68Major Requirements67-69Electives6-11Electives5-10Total number of hours required for major66-68Total number of hours required for major67-69 | | | | | | | 31-34 | |
| Major Requirements66-68Major Requirements67-69Electives6-11Electives5-10Total number of hours required for major66-68Total number of hours required for major67-69 | | | | | | | | |
| Electives6-11Electives5-10Total number of hours required for major66-68Total number of hours required for major67-69 | | | | | | | | |
| Total number of hours required for major 66-68 Total number of hours required for major 67-69 | | | | | | | | |
| Total number of hours required for degree 120 Total number of hours required for degree 120 | Total number of hours required for major | | | | | <u> </u> | number of hours required for major | |
| | | | | | | Total n | umber of hours required for degree | 120 |

7. Explanation of the Change:

A laboratory is being added to DS 413-513 (becoming DS 413-413L/DS 513-513L) which is a required course within the major. This will add one additional credit to those required for the major and decrease the general electives available by one credit.