

## Department of Agriculture and Nutrition Science

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### FACULTY:

*Professor:* Cynthia B. Wright; *Associate Professors:* Artis Grady, Dean L. Winward; *Assistant Professors:* Chad L. Gasser, Matt Schmidt, Lee G. Wood; *Farm and Ranch Manager:* Kirt M. Bussio; *Agriculture Technician:* Seth Hall

## Degrees Offered

### Bachelor of Science:

- Human Nutrition

### Bachelor of Interdisciplinary Studies

- Agriculture Science and Industry (Examples of coursework that can be used toward a BIS degree include Agribusiness, Animal Science, Plant Science and General Agriculture)

### Associate of Applied Science

- Agriculture: Livestock Farm Management
- Equine Studies

### Minors

- Agriculture
- Nutrition and Food Science

### CERTIFICATES, LICENSURE

#### Certificates

- Agriculture: Livestock Farm Management

### SUMMARY OF FIELDS OF STUDY

Agriculture  
Nutrition and Food Science

## AGRICULTURE

### Agriculture Science Mission Statement

The mission of the agriculture program is to offer all students the opportunity to understand the discipline of agriculture as an applied science and a model for the principles of bioeconomics. The program is closely allied to the concept of service to the agricultural community. Recognizing the diversity of agriculture, faculty will articulate partnerships with colleagues and programs across the university campus. The agriculture program demonstrates teaching excellence by maintaining a faculty of well-educated and experienced agriculturalists. The agriculture program promotes a strong, hands-on, structured learning atmosphere and provides opportunities for independent inquiry and scholarship of application by students.

### Goals Statement

1. Through a broad offering of one, two, and four-year programs, the agriculture program prepares students for careers in agricultural

science and industry, farm and ranch management, and related public or private service.

2. The agriculture program prepares students to pursue advanced degrees or admission to a professional school upon completion of their work in the agriculture program at SUU.

### Intended Outcomes/Objectives

1. Students will demonstrate knowledge and applications-based competency in their particular certificate program, degree, and emphasis (i.e., Certificate in Livestock Farm Management; AAS in Livestock Farm Management; BIS in Agricultural Science and Industry with an emphasis in agribusiness, animal science, plant science, or general agriculture; pre-veterinary studies).
2. Students will use scientific methodology, employ critical thinking skills and apply appropriate tools/methods/theories to address problems, carry out investigations, and meet the challenges of providing food, fiber, by-products, and recreational opportunities to others.
3. Students will communicate effectively using terminology appropriate to the discipline.
4. Students will express satisfaction with their learning experience and be well prepared for post-graduation plans and opportunities.

## NUTRITION

### Nutrition Science Mission Statement

Recognizing the critical role of nutrition to all human endeavors, the mission of the nutrition program is to provide sound, science-based principles, theories and applications to students whose personal or professional interests embrace the discipline. The nutrition program at SUU prepares students for a number of related careers or entrance into a graduate program upon degree completion at SUU. Additionally, the program promotes wellness by offering a minor and support courses to compliment a variety of other disciplines, especially those related to health and human services and athletics. The program demonstrates dedication to outstanding teaching by maintaining a faculty of well-educated, professionally qualified professor-practitioners.

### Goals Statement

1. The goal of the nutrition program at SUU is to prepare students for a number of related careers or entrance into a graduate program upon degree completion at SUU.
2. The intent of the program is to foster a broad understanding of the science of nutrition as it is integrated into all human pursuits.

### Intended Outcomes and Objectives

1. Students will demonstrate their knowledge of the discipline (i.e., nutrition and food science) at a level appropriate to the offering.
2. Students will be satisfied with the learning experiences afforded them by the program.
3. Students will recognize and be prepared for numerous opportunities afforded them professionally or to pursue further study.

## Degree Requirements

Agricultural Science and Industry Bachelor of Interdisciplinary Studies	
Course Number and Title	Credits
<b>General Education Core (see page 103)</b>	
Core Course Requirements	17-18
Knowledge Areas Requirements (must take AGSC 1010: Agriculture & Society)	19

<b>Agriculture Core (29 hours)</b>	
AGSC 1100 Principles of Animal Science	3
AGSC 1110 Crop Production	3
AGSC 1120 Crop Production Lab	1
AGSC 1990 Agriculture Leadership	1
AGSC 3020 Agribusiness Management	3
AGSC 3400 Feeding & Nutrition of Horses & Livestock	3
AGSC 3410 Feeding and Nutrition Lab	1
AGSC 3560 Soil Science	3
AGSC 3570 Soil Science Lab	1
AGSC 4990 Agriculture Seminar	1
ECON 2010 Principles of Microeconomics	3
ACCT 2010 Financial Accounting	3
ENGL 2040 Professional Business Writing Or COMM 4240 Technical Report Writing	3
<b>Select one of the following sets of courses:</b>	
<b>Agribusiness courses (18 hours)</b>	
ACCT 2020 Managerial Accounting	3
ACCT 2050 Business Law I	3
MKTG 3010 Marketing Principles	3
MGMT 3180 Management Organization	3
3000 - LEVEL *Two Courses Plant or Animal Mgt (AGSC Prefix)	6
<b>Animal Science and Industries courses (17 hours)</b>	
AGSC 3150 Genetics of Livestock & Horse Improvement	3
AGSC 3500 Applied Reproduction in Livestock and Horses	3
AGSC 3510 Reproduction Lab	1
BIOL 3060 Genetics	3
BIOL 3065 Genetics Lab	1
3000 – LEVEL * Two courses Animal Management (AGSC Prefix)	6
<b>Plant Science and Industries courses (18 hours)</b>	
AGSC 3030 Forages	3
AGSC 3040 Forages Lab	1
AGSC 3230 Pests and Pest Management	3
AGSC 3240 Pest Mgt. Lab	1
AGSC 3700 Principles of Irrigation	3
AGSC 3710 Irrigation Lab	1
AGSC 3000 LEVEL *Two courses Plant Science	6
*Up to 3 credit hours of AGSC 3600 Directed Studies or AGSC 4853 Undergraduate Research, may be substituted.	
<b>General Agriculture courses (17 hours)</b>	
In addition to the core, students will select a minimum of 17 semester credits to meet a specific interest or career goal. That goal may not be satisfied by emphasis areas above. Examples might include agriculture journalism, natural resources, GIS/GPS, international agriculture. The program must be approved by an advisor, department chair, and the dean.	
Free Electives	36-38
<b>Total Credits, B.I.S. degree</b>	<b>120</b>

<b>Agriculture Minor</b>	
<b>Course Number and Title</b>	<b>Credits</b>
<b>Required</b>	
AGSC 1010 Agriculture and Society	3
AGSC 1100 Principles of Animal Science	3
AGSC 1110 Crop Production	3
AGSC 1120 Crop Production Lab	1
AGSC 3020 Agribusiness Management	3
AGSC 3560 Soil Science	3
AGSC 3570 Soils Lab	1
Minimum of three credit hours selected from: AGSC 2600, 2615, 2625, 2630, 3100, 3200, 3250, 3350.	3
<b>Total Credits</b>	<b>20</b>

<b>Agriculture Associate of Applied Science</b>	
<b>Course Number and Title</b>	<b>Credits</b>
<b>General Education Core (see page 103)</b>	
Complete a minimum of 20-21 credit hours in general education as follows: A minimum of one course in each of the core categories. Three courses representing three of six remaining general education categories. Students should check the department AAS requirements to determine if specific general education classes are recommended (English 1010 will satisfy the requirement for an AAS degree).	20-21
<b>Core Requirements (21 hours)</b>	
AGSC 1010 Agriculture and Society	3
AGSC 1100 Principles of Animal Science	3
AGSC 1990 Agriculture Leadership	1
AGSC 3020 Agribusiness Management	3
AGSC 3150 Genetics of Livestock & Horse Improvement	3
AGSC 3400 Feeding & Nutrition of Horses & Livestock	3
AGSC 3410 Feeding and Nutrition Lab	1
AGSC 3500 Applied Reproduction in Livestock & Horses	3
AGSC 3510 Reproduction Lab	1
<b>Practicum/Internship (8 hours)</b>	
AGSC 1950 Ag Enterprise Practicum- Production	4
AGSC 2950 Ag Enterprise Practicum- Management	4
Students who will apply AAS degree credit toward a four year degree may consult with an advisor to substitute AGSC 4894, Internship, for practicum.	
<b>Production/Management Courses (10 hours)</b>	
Courses are to be selected from those listed below. Students must select at least one production and one management course. Students should consult with their faculty advisor. Under special circumstances and with faculty advisor consent, students may fulfill the balance of the production/management requirement by submitting an agricultural science prefix course not listed below:	
AGSC 2600 Swine Production Practices	2
AGSC 2615 Ruminant Livestock Production I	2

AGSC 2625 Ruminant Livestock Production I I	2
AGSC 2630 Horse Production Practices	2
AGSC 3100 Beef Management	3
AGSC 3200 Swine Management	3
AGSC 3250 Sheep and Wool Management	3
AGSC 3350 Horse Science and Industry	3
<b>Crops/Soils/Range Courses (8 hours)</b>	
AGSC 1110 Crop Production	3
AGSC 1120 Crops Lab	1
AGSC 3030 Forage Crops	3
AGSC 3040 Forages Lab	1
AGSC 3230 Pests and Pest Management	3
AGSC 3240 Pests Lab	1
AGSC 3560 Soil Science	3
AGSC 3570 Soils Lab	1
AGSC 3700 Principles of Irrigation	3
AGSC 3710 Irrigation Lab	1
RANG 3600 Range Management	3
RANG 3610 Range Lab	1
<b>Total Credits (minimum)</b>	<b>67</b>

AGSC 1110 Crop Production	3
AGSC 1120 Crops Lab	1
AGSC 3030 Forage Crops	3
AGSC 3040 Forages Lab	1
AGSC 3700 Principles of Irrigation	3
AGSC 3710 Irrigation Lab	1
RANG 3600 Range Management	3
RANG 3610 Range Lab	1
<b>Total Credits</b>	<b>31</b>

BS Degree in Biology with an Agricultural Science or Pre-veterinary Advisement Option: consult the biology section of the catalog for details on these options.

*Note: Any course applied to an agriculture major with a grade below a C- must be retaken and a higher grade achieved. (Courses over 10 years old will not be accepted.)*

<b>Agriculture Certificate in Agriculture with Emphasis In Livestock Farm Management</b>	
<b>Course Number and Title</b>	<b>Credits</b>
<b>Core Requirements (15 hours)</b>	
AGSC 1010 Agriculture and Society	3
AGSC 1100 Principles of Animal Science	3
AGSC 1990 Agriculture Leadership	1
AGSC 3400 Feeding & Nutrition of Horses & Livestock	3
AGSC 3410 Feeding and Nutrition Lab	1
AGSC 3500 Applied Reproduction in Livestock & Horses	3
AGSC 3510 Reproduction Lab	1
<b>Practicum/Internship (4 hours)</b>	
AGSC 1950 Ag Enterprise Practicum-Production	4
<b>Production/Management Courses (8 hours)</b>	
Courses are to be selected from those listed below. Students must select at least production and one management course. Students should consult with their faculty advisor. Under special circumstances and with faculty advisor consent, students may fulfill the balance of the production/management requirement by submitting an agricultural science prefix course not listed below:	
AGSC 2600 Swine Production Practices	2
AGSC 2615 Ruminant Livestock Production I	2
AGSC 2625 Ruminant Livestock Production II	2
AGSC 2630 Horse Production Practices	2
AGSC 3100 Beef Management	3
AGSC 3200 Swine Management	3
AGSC 3250 Sheep and Wool Management	3
AGSC 3350 Horse Science and Industry	3
<b>Crops/Range Courses (4 hours)</b>	

<b>Human Nutrition Degree Bachelor of Science degree</b>	
<b>Course Number and Title</b>	<b>Credits</b>
<b>General Education Core (see page 103)</b>	
Core Course Requirements	17-18
Knowledge Areas Requirements (must take NFS 1020, MATH 1050, CHEM 1210/1215)	19
<b>University Requirements</b>	
BS Degree – Math or Science minimum requirement (12 hours)	
<b>Human Nutrition Core (23 hours)</b>	
NFS 1240 Culinary Arts	2
NFS 1241 Culinary Arts Lab	1
NFS 2020 Nutrition in the Life Cycle	3
NFS 3020 Nutrition as Related to Fitness and Sports	3
NFS 4020 Advanced Human Nutrition	3
NFS 4200 Food Science	3
NFS 4210 Food Science Lab	2
NFS 4480 Community Nutrition	3
NFS 4850 Undergraduate Research	2
NFS 4950 Senior Seminar	1
<b>Elective Courses (select a minimum of 18 hours)</b>	
BIOL 1610* General Biology I	3
BIOL 1615 General Biology I Lab	1
BIOL 1620* General Biology II	3
BIOL 1625 General Biology II Lab	1
BIOL 2060* General Microbiology	3
BIOL 2065 General Microbiology Lab	1
BIOL 2320* Human Anatomy	3
BIOL 2325* Human Anatomy Lab	1
BIOL 2420* Human Physiology	3
BIOL 2425* Human Physiology Lab	1
BIOL 3050 Biomedical Ethics	2
BIOL 3060 Genetics	3

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BIOL 3065 Genetics Lab	1
CHEM 1210*Principles of Chemistry I	4
CHEM 1215* Principles of Chemistry I Lab	1
CHEM 1220 Principles of Chemistry II	4
CHEM 1225 Principles of Chemistry II Lab	1
CHEM 2310 Organic Chemistry I	4
CHEM 2320 Organic Chemistry II	4
CHEM 2325 Organic Chemistry II Lab	2
CHEM 4110 Biochemistry I	4
CHEM 4120 Biochemistry II	4
MATH 1040 Statistics	4
PE 3070 Exercise Physiology	3
SOC 4100 Sociology of Health and Medicine	3
*These courses may satisfy GE requirements.	
Note: Students are strongly encouraged to consult their advisor before selecting coursework. Some courses are only taught one semester per year. Also, note that a grade below "C" will not be accepted in the major. No minor is required. (Courses over 10 years old will not be accepted.)	
Free Electives (includes completing B.S. requirements)	40
<b>Total Credits, B.S. degree (minimum)</b>	<b>120</b>

Nutrition and Food Sciences Minor	
Course Number and Title	Credits
<b>Option I (Nutrition Related) Requirements</b>	
NFS 2020 Nutrition in the Life Cycle	3
NFS 3020 Nutrition as Related to Fitness & Sports	3
NFS 4020 Advanced Human Nutrition	3
NFS 4480 Community Nutrition	3
CHEM 1120 Elementary Organic Bio-Chemistry Or CHEM 1220 Principles of Chemistry II	5 4
CHEM 1125 Elementary Organic Bio-Chemistry Lab Or CHEM 1225 Principles of Chemistry II Lab	1 1
<b>Note:</b> NFS 1020 and CHEM 1110/1115 or CHEM 1210/1215 MUST be taken as GE <b>Recommended Electives:</b> Human Physiology & Lab: BIOL 2420/2425 and General Microbiology & Lab: BIOL 2060/2065	
<b>Option II (Food Science Related) Requirements</b>	
NFS 1020 Scientific Foundations of Human Nutrition	3
NFS 1240 Culinary Arts	2
NFS 1241 Culinary Arts Lab	1
NFS 4200 Food Science	3
NFS 4210 Food Science Lab	2
CHEM 1120 Elementary Organic Bio-Chemistry Or CHEM 1220 Principles of Chemistry II	5 4
CHEM 1125 Elementary Organic Bio-Chemistry Lab Or CHEM 1225 Principles of Chemistry II Lab	1 1
<b>Note:</b> CHEM 1110/1115 or CHEM 1210/1215 MUST be taken as GE	

<b>Recommended Electives:</b> General Microbiology & Lab: BIOL 2060/2065	
Note: Students are strongly encouraged to consult their advisor before selecting coursework. Some courses are only taught one semester per year. Also, note that a grade below "C" will not be accepted in the major or minor courses. (Courses over 10 years old will not be accepted.)	
<b>Total Credits (Option I)</b>	<b>18</b>
<b>Total Credits (Option II)</b>	<b>17</b>

Equine Studies Associate of Applied Science	
Course Number and Title	Credits
<b>General Education Core</b>	
Core Course Requirements	11-12
Knowledge Area Requirements	9-10
<b>Core Course Requirements (36 hours)</b>	
AGSC 1010 Agriculture & Society	3
AGSC 1100 Principles of Animal Science	3
AGSC 1750 Beginning Horsemanship	1
AGSC 1990 Agriculture leadership	1
AGSC 2630 Horse Production Practices	2
AGSC 2760 Intermediate Horsemanship	2
AGSC 2950 Practicum	6
AGSC 3020 Agribusiness Management	3
AGSC 3150 Genetics of Livestock & Horse Improvement	3
AGSC 3350 Horse Science & Industry	3
AGSC 3400 Feeding & Nutrition of Horses & Livestock	3
AGSC 3410 Feeding & Nutrition Lab	1
AGSC 3500 Applied Reproduction in Livestock & Horses	3
AGSC 3510 Reproduction Lab	1
AGSC 3750 Advanced horsemanship	1
Sub-Total	36
<b>Elective Courses (8 Credit hours)</b>	
AGSC 1110 Crop Production	3
AGSC 1120 Crops Lab	1
AGSC 3030 Forage Crop	3
AGSC 3040 Forages Lab	1
AGSC 3230 Pests & Pest Management	3
AGSC 3240 Pests Lab	1
AGSC 3560 Soil Science	3
AGSC 3570 Soils Lab	1
RANG 3600 Range Management	3
RANG 3610 Range Lab	1
Sub-Total	8
<b>Total Credits (minimum)</b>	<b>64-65</b>