

# BACHELOR OF SCIENCE, MAJOR IN ANIMAL SCIENCE WITH TEACHING CERTIFICATION

## Agriculture, Food, and Natural Resources (AFNR) Teacher Certification

The primary emphasis of the teaching certification program is the preparation of secondary teachers of Agricultural, Food, and Natural Resources (AFNR). Students gain a broad background in the agricultural sciences along with professional preparation courses in agricultural education and secondary pedagogy. This comprehensive and diverse background prepares students for a wide variety of professional agricultural careers.

The teaching certification option can be chosen with any of the agricultural emphasis majors as shown. Students majoring in interdisciplinary agriculture, agricultural business, animal science, agricultural engineering technology, or plant and soil sciences who are seeking AFNR teacher certification select CISE as their minor.

All students seeking teaching certification must be advised each semester to ensure proper sequencing of classes.

Code	Title	Hours
<b>Bachelor of Science, Major in Animal Science with Teaching Certification</b>		
Core Curriculum ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/</a> )		
Component Area I (Communication)		6
Component Area II (Mathematics)		3
Component Area III (Life and Physical Science)		8
Component Area IV (Language, Philosophy, and Culture)		3
Component Area V (Creative Arts)		3
Component Area VI (U.S. History)		6
Component Area VII (Political Science/Government)		6
Component Area VIII (Social and Behavioral Sciences)		3
Component Area IX (Component Area Option)		4
<b>Degree Specific Requirements</b>		
ACOM 3360	Communication Skills for Agriculturists	3
AGRI 1309 or CSTE 1330	Computers in Agriculture (or approved substitute) Introduction to Computers	3
CHEM 1406 or CHEM 1411	Inorganic & Envir Chemistry <sup>1</sup> General Chemistry I	4
CHEM 1407 or CHEM 1412	Intro Organic and Biochemistry <sup>1</sup> General Chemistry II	4
MATH 1314 or MATH 1332	Pre Calculus Algebra <sup>2</sup> College Mathematics	3
MATH 1369 or STAT 1369	Elementary Statistics Elementary Statistics	3
<b>Animal Science Major Core</b>		
AGBU 2317	Principles of Agri Economics	3
AGET 2303	Intro to Ag Engineering Tech	3
AGRI 1131	Intro to Pro Leadership Skills	1
ANSC 1319 & ANSC 1119	Animal Science and Animal Science Laboratory	4
ANSC 3363	Anatomy & Physiology of the Domestic Animal	3
ANSC 3373	Animal Nutrition	3
ANSC 3376	Meat Science	3
ANSC 4389	Animal Reproduction	3
ANSC 4394	Animal Feeds And Feeding	3
PLSC 1307 & PLSC 1107	Plant Science and Plant Science Laboratory	4
<b>Animal Science Major Core for Teaching Certification</b>		

AGBU 2389	Agribusiness Financ'l Analysis	3
AGED 3310	Teaching Ag Technology	3
AGED 3320	The Secondary Agriculture Education Program	3
AGED 4388	Secondary Agriculture Education Program Management	3
AGET 4381	Adv Agricultural Mechanics	3
ANSC 4360	Livestock Mgt Techniques	3
Select one from the following Animal Production Electives:		3
ANSC 4376	Sheep & Goat Production & Mgt	
ANSC 4380	Beef Cattle Production & Mgmt	
EQSC 2364	Equine Science	
WMGT 3381	Game Animal Production	
PLSC 3440	Soil Science	4
PLSC 4370	Forage Crops & Pasture Mgmt	3
or PLSC 4383	Range Management	
<b>Teaching Certification</b>		
CISE 3384	The Teaching Profession	3
CISE 4364	Mth Tch Secondary Schools	3
CISE 4378	Content Literacy	3
CISE 4379	Differentiated Pedagogy	3
CISE 4380	Respon Of Pro Educator	3
Secondary Ed Courses - AGED		
AGED 4364	Methods of Teaching Agricultural Education	3
AGED 4365	Student Teaching in Agriculture Education	3
AGED 4366	Student Teaching in Agriculture Education	3
AGED 4394	Agriculture Education Learning Environments	3
Total Hours		136

<sup>1</sup> CHEM 1406 and CHEM 1407 satisfy the Core Curriculum requirement for Component Area III (Life and Physical Science) and the Degree Specific Requirement.

<sup>2</sup> Satisfies requirement for Core Curriculum Component Area II (Mathematics).

### Note

Students must earn a 2.5 minimum GPA in all Education coursework (SHSU and cumulative).

Students must earn a "C" or better in all Education coursework.

Students must earn a cumulative 2.0 GPA in all Animal Science major coursework.

### First Year

Fall	Hours	Spring	Hours
Component Area IX ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix</a> )		1 AGRI 1309 or CSTE 1330	3
AGET 2303		3 CHEM 1406 or 1411 <sup>3</sup>	4
AGRI 1131		1 ENGL 1302 <sup>1</sup>	3
ANSC 1319 & ANSC 1119		4 HIST 1301 <sup>4</sup>	3
ENGL 1301 <sup>1</sup>		3 MATH 1369 or STAT 1369	3

MATH 1314 or 1332 <sup>2</sup>	3				
	15			16	
<b>Second Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Component Area V ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav</a> )		3 Component Area IV ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav</a> )		3	
AGBU 2317		3 Component Area VIII ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii</a> )		3	
ANSC 3363		3 ANSC 3373		3	
CHEM 1407 or 1412 <sup>3</sup>		4 POLS 2305 <sup>5</sup>		3	
HIST 1302 <sup>4</sup>		3 PLSC 1307 & PLSC 1107		4	
	16			16	
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
ANSC 3376		3 ACOM 3360		3 Component Area IX ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix</a> )	3
AGBU 2389		3 ANSC 4360		3 PLSC 3440	4
AGED 3320		3 ANSC 4389		3 AGED 3310	3
CISE 3384		3 CISE 4378		3 AGED 4388	3
POLS 2306 <sup>5</sup>		3 CISE 4380		3	
		PLSC 4370 or 4383		3	
	15			18	13
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
AGET 4381		3 AGED 4364		3	
Animal Production Elective <sup>6</sup>		3 AGED 4365		3	
ANSC 4394		3 AGED 4366		3	
CISE 4364		3 AGED 4394		3	

CISE 4379	3	
	15	12

Total Hours: 136

- 1 Satisfies Core Curriculum requirement for Component Area I (Communication).
- 2 Satisfies requirement for Core Curriculum Component Area II (Mathematics).
- 3 Satisfies the Core Curriculum requirement for Component Area III (Life and Physical Science).
- 4 Satisfies Core Curriculum requirement for Component Area VI (U.S. History).
- 5 Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).
- 6 Select one of the Animal Production Electives from the course in the below list.

Code	Title	Hours
<b>Animal Production Elective Courses<sup>6</sup></b>		
ANSC 4376	Sheep & Goat Production & Mgt	3
ANSC 4380	Beef Cattle Production & Mgmt	3
EQSC 2364	Equine Science	3
WMGT 3381	Game Animal Production	3

#### Note

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The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The BS in Animal Science with Teaching Certification is designed to provide graduates with the following marketable skills:

- Ability to make livestock management decisions based on scientific, economic, and other applicable information.
- Knowledgeable of each segment of the food animal and meat industry and make critical marketing decisions in each.
- Understand nutrition as it applies to animal performance and be able to develop balanced rations to meet physiological and production needs.
- Develop presentations and effectively communicate factual information, logically and concisely, both orally and in writing.
- Understand anatomy, physiology, and functions of the major organs and systems of livestock.
- Manage, organize, and conduct Supervised Agricultural Experience Programs, Leadership, Career, and Speaking Development Events.
- Develop annual and long range plans (program of activity, semester, and lesson plans, etc.)
- Utilize effective research based techniques to develop a positive classroom environment.
- Create lessons and units of instruction to meet the Texas Essential Knowledge and Skills requirements for Agriculture, Food and Natural Resources classes.