**Lesson Introduction and Corresponding TEKS**

Careers in Animal Science are concerned with the science and business of producing domestic livestock species, including but not limited to beef cattle, dairy cattle, horses, poultry, sheep, and swine. In addition, animal science includes companion animals, including their nutrition, care, and welfare. An animal scientist applies principles of the biological, physical, and social sciences to the problems associated with livestock and companion production and management. Animal Science is also concerned with foods of animal origin: meat, dairy foods, and eggs. The food industry is one of the largest and most important industries in the United States.

If you are interested in efficient production of food animals, processing and consumption of high-quality meats and dairy products, use of companion animals for recreation or leisure purposes, or the maintenance of animal health and well-being, then a career in one of the many animal sciences fields may be your key to a rewarding future. Professional education and training in the animal sciences can prepare you for challenging career opportunities in such areas as animal production, breeding, health maintenance and disease control, marketing, processing, distribution, and numerous allied service industries. Additionally, it is a convenient major for biologists interested in animals and an eventual career after veterinary, medical, dental, or graduate school.

Animal scientists must have formal training and appropriate experience to learn and apply the complex principles involved in animal production, care, and use. Knowledge of such basic subjects as animal behavior and management, genetics, microbiology, nutrition, physiology, reproduction, and meat science is essential to persons entering most animal sciences professions. However, a farm, production agriculture or animal-related background is not required.

Global forces are demanding more from the agriculture industry. A growing world population with changing patterns of diet requires more food. This food production must take place on a finite amount of land during climatic change. It must be integrated with the needs of people and the environment. The complex challenges of the next century demand agricultural professionals who can identify opportunities and devise innovative solutions. The broad knowledge base in animal science prepares students for rewarding careers.

[ <http://www.asas.org/career_info.asp?autotry=true&ULnotkn=true> ]

**Lesson Outline**

After completing all lessons in this unit, you will have a general understanding of Unit Employability Characteristics.

This unit is divided into the following four sections:

14.1 Career Development and Entrepreneurship Opportunities

14.2 Career Preparation Related to Animal Systems

14.3 Occupational Safety and Health in the Workplace

14.4 Employer’s Expectations

14.5 Lifelong Learning

This lesson should take approximately 2 hours to complete. You may take the evaluation at any time and you must score 80% to get credit for completing this topic.