



## ARTICULATION AGREEMENT

Date Approved 09/25/18

<b>Yuba College Course:</b>	<b>Dept:</b> Social Science <b>Course No:</b> AG 45 <b>Title:</b> Principles of Animal Science	<b>High School or ROP Course:</b>  <b>Hours:</b>	Animal Science  180 hrs
<b>College:</b>	Yuba College	<b>School/ROP:</b>	Woodland High School

### A. COLLEGE UNITS: AG 45 - 3 Units

#### A. GENERAL COURSE DESCRIPTION FOR AG 45:

An overview of the principles of animal science and the interrelationship of domestic animals and humankind. This course will investigate animal anatomy, physiology, reproduction, nutrition, health, products and by-products as well as behavior and genetics from a scientific perspective. Current topics on influences of humans on genetic potential and productivity will be addressed. Experimental design and reporting, animal dissections, basic animal handling and husbandry practices, recognition of animal health, and use of biotechnology in animal science. Not open for credit to students with credit in AG 45L.

#### F. COURSE CONTENT FOR AG 45:

1. Introduction to Animal Agriculture
  - a. Importance of livestock to the world and United States
  - b. Economic importance to agriculture
  - c. Animal contribution to human needs
  - d. Industry issues and challenges
  - e. Ethnic contributions
2. Careers and Career Preparation in the Animal Sciences
  - a. Career preparation
  - b. Employment opportunities in animal production and management
  - c. Employment opportunities in international agriculture
  - d. Future opportunities
3. Overview of the Livestock Industry
  - a. The beef cattle and dairy industry
  - b. The swine industry
  - c. The sheep and wool industry
  - d. The poultry industry
  - e. The horse industry

4. Evaluation and Performance Livestock
  - a. Identifying external anatomy
  - b. Evaluating type and conformation
  - c. Perspective of carcass composition to the live animal
  - d. Understanding carcass and performance data
5. The Animal Food Industry
  - a. Food products and processing
  - b. Consumption and marketing strategies
  - c. Trends and future outlook
  - d. Health and nutritional considerations
6. Reproduction
  - a. Reproductive organs and their functions
  - b. Animal breeding
  - c. Mating systems
  - d. Fertility
7. Genetics
  - a. Fertilization
  - b. Gene modification and interactions
  - c. Genetic improvement and variation
  - d. DNA and RNA
8. Nutrition
  - a. Nutrients
  - b. Feeds and feed composition
  - c. Digestive systems
  - d. Growth and development
9. Animal Health
  - a. Prevention and the environment
  - b. Major diseases of farm animals
  - c. Detecting unhealthy animals
  - d. Treatment and care
10. Issues Affecting the Animal Industry
  - a. Animal behavior

- b. Animal welfare
- c. Advances in biotechnology
- d. Government and environmental concerns
- e. Food safety and consumer awareness

**G. COMPETENCIES AND SKILL REQUIREMENT (PERFORMANCE OBJECTIVES) FOR AG 45:**

***At the conclusion of this course, the student should be able to:***

1. Students will demonstrate their knowledge of the scientific method through a laboratory experiment to investigate animal nutrition. Students will collect experimental data, analyze data, and draw conclusions from their findings.
2. Students will demonstrate a basic understanding of biological processes in livestock species that focus on animal organization, genetics, nutrition, reproduction, and their practical application through analysis of current event articles.

**H. CREDIT BY EXAMINATION CRITERIA:**

Students must obtain a grade of 'B' or better in the course and a grade of 'B' or better on the final examination.

**I. PROCEDURES AND/OR CRITERIA FOR COURSE ARTICULATION:**

1. The high school/ROP instructor will enter an articulation agreement with Yuba College.
2. Students will enroll into the CTE Transitions Program during the academic year at their high school/ROP.
3. When the student has completed the approved credit by examination criteria for the course the high school/ROP instructor will provide CTE Transitions Program Office the course grade and final exam grade.
4. CTE Transitions Program processes students that met credit by examination criteria.
5. Students are awarded transcript credit for the articulated course in which they completed.

**J. TEXTBOOKS OR OTHER SUPPORTING MATERIALS (INCLUDING SOFTWARE):**

Modern Livestock and Poultry Production

Agreement was based on Statewide Career Pathways Project template: Yes  No





Name of Template used: N/A

This agreement will be reviewed annually. \_\_\_\_\_

Signatures are provided per the Articulation Credit by Examination Agreement Form:

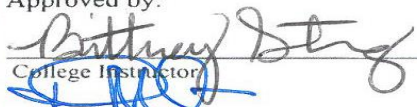


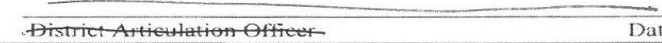
**HIGH SCHOOL/ROP/DISTRICT SIGNATURE:**

Requested by:

 High School Instructor (Print & Sign)	<u>3/29/18</u> Date	 High School Dept Chair/Coordinator (Print & Sign)	<u>3/20/18</u> Date
 High School Principal (Print & Sign)	_____ Date	_____ YCOE College/Career Ready Director (Print & Sign)	_____ Date
 HS District Secondary Ed Director (Print & Sign)	<u>3/30/2018</u> Date		

**COLLEGE SIGNATURES:**

Approved by:

 College Instructor	<u>9/20/18</u> Date	 Campus Dean/Department Dean	<u>9/27/18</u> Date
 V.P. Academic and Student Services	_____ Date	 District Articulation Officer	_____ Date