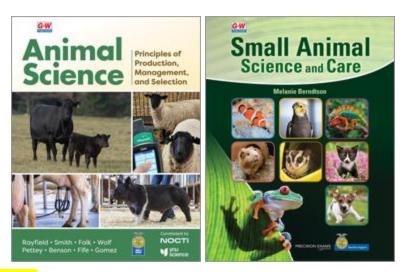
a-g CTE Animal Science 1 A/B

"Animals are such agreeable friends—they ask no questions; they pass no criticisms." -George Eliot



2122/2022.2 a-g CTE Animal Science 1 A/B (High School - Section 1)
(2 semesters, 10 credits)
Instructor: J Weston
Online

Instructor

Janine Weston jweston@cwcharter.org (510) 299-2586

Please review the CWCS Master Class Syllabus that will be used in the Parent/Student Orientation course.

Course Information Class Time

Online Class Sessions:

Tuesdays/Thursdays, 9:30 am - 10:30 am

- Semester 1 First Class Meeting: Tuesday, 8/19/25
 Last Day to Add or Drop is Wednesday, 9/03/25 (Students will be charged the full price of the course if dropping the class after this deadline.) OR
- Semester 2 First Class Meeting: Tuesday, 1/6/26
 Last Day to Add or Drop is Friday, 1/23/25 (Students will be charged the full price of the course if dropping the class after this deadline.)

CWCS's **a-g CTE Animal Science 1 A/B** online course offers students the opportunity to study at home while employing technology as a learning tool, meeting with other students in a virtual classroom, and receiving live instruction from a teacher.

Course Overview

This is an a-g college preparatory elective "g" course, following the <u>a-g course outline</u>, that helps satisfy high school graduation requirements and prepare students for college and career. Students should expect to spend a consistent amount of time each day (30 minutes, on average) on the assignments and labs. Much of the teacher-supervised learning is done independently by the student, as the class meets online only twice per week.

During the online sessions, an overview is given of the week's objectives and students engage in review, interactive activities, presentations, and discussions.

During independent work, students read, complete assignments, take formative assessments, perform laboratory activities, and apply learning to their *Species Management, Production & Marketing Guide, STEM Project*, and *Supervised Agricultural Experience (SAE)*. A final project provides a summative conclusion of each semester's content.

The goal of this CTE course is to lead students towards a greater curiosity in, understanding of, and appreciation for real-world problems and applications in the field of animal science, through inquiry, analysis, experimentation and mathematical manipulations. While performing comparative studies of large, small, and specialty animals, students will ask questions, formulate arguments, discuss scientific ideas with other students and teachers, differentiate observations from interpretations, engage in critical thinking, and write clearly and coherently with reason and evidence. Using a lab-centered, hands-on, learn-by-doing approach, key activities, including a Species Management, Production & Marketing Guide, STEM Project, and Supervised Agricultural Experience (SAE), aim at engaging all students in learning and understanding while developing and encouraging scientific habits of mind to prepare for college and career. Formative and summative assessments demonstrate student development of deep content understanding, as well as mastery of scientific practices and skills. Students will hone their ability to organize, perform, analyze, draw and communicate conclusions from experimental investigations regarding diet, inheritance, habitat, behavior and more as they consider how to create humane, ecologically, and economically sustainable animal production, management, and selection systems. Students will explore and compare fundamental animal science concepts such as animal anatomy and physiology, nutrition, reproduction and genetics, health and welfare, animal production, technology, and the management and processing of animals, their products, and by-products. Students will also investigate career opportunities, the role animal science plays in addressing real-world problems, and how its study contributes to important developments in food supply, epidemiology, medical advancements and more.

Curriculum

Two textbooks are required for this course and may be reserved and checked out from the student's local Resource Center Library via Atriuum, using the student's district ID for username and password.

- Animal Science: Principles of Production, Management, and Selection
 - o Author(s): John S. Rayfield, Kasee L. Smith, Jeremy M. Falk, Kattlyn J. Wolf, Allen Pettey, Andrew Benson, Jessica N. Fife, Noe Alberto Gomez
 - o Publisher: Goodheart-Wilcox Company, Inc.
 - o Edition: 2025
 - o Primary: Yes

o Website/URL: https://www.g-w.com/animal-science-2025

Small Animal Science and Care

o Author: Melanie Berndtson

o Publisher: Goodheart-Wilcox Company, Inc.

o Edition: 2023o Primary: Yes

o Website/URL: https://www.g-w.com/small-animal-science-care-2023

Materials

- Computer with camera and working external headset with mic (computer speakers do not work successfully with the Canvas setup). Plug-in headsets (rather than Bluetooth) work best. Class is much more engaging if all students can talk in class using their mic.
- 3-ring 1" binder
- Binder paper for notes
- Graph paper for laboratory notebook
- Pencil / pen
- Markers / crayons / colored pencils

Requirements

- Class textbooks
- School <u>Google Account For Education</u> (GAFE) you will use this to log in to various learning platforms
- Gmail Account and ability to open/create word documents and pdfs (Adobe Acrobat Reader)
- Reliable Internet access
- Canvas Login link: https://cwcs.instructure.com/login/canvas
- Once logged in, you will click on the Conference BigBlueButton to attend class

Guidance Department

CTE Webpage

Mastery-Based Grading

Students will be graded on attendance and participation in the online sessions, daily homework and classwork assignments, module assessments, and a semester final exam or project. All assignments including quizzes, assessments and projects may be submitted or resubmitted up to **3 times** for a higher grade.

Course Overall Grade - Weighting by Assignment Groups

25% **Assignments** (Learning Activities, Presentations and Labs)

25% **Discussions, Attendance and Participation** in online sessions

25% **Assessments** (formative Quizzes, Tests, Exit Tickets)

25% **Final Project/Exam** (summative final project elements and/or comprehensive written final examination, including laboratory concepts and skills)

Grading Scale

90% - 100% A 80% - 89% B 70% - 79% C 60% - 69% D +/- added at the top/bottom 3% of each grade scale

Homework and Classwork

The tentative Pacing Guide outlines the lessons and topics that will be covered each week. Assignments will be posted each week in Canvas. The assignments are given a week at a time. Students should manage their own time to complete the assigned exercises before our class meeting the following week. As students read through the textbooks & view the online modules, they may wish to take notes in a composition book or spiral notebook to assist with completing the correlating assignments.

The weekly assignments in the pacing guide should be completed digitally and submitted via Canvas unless specified otherwise. This work is shown to the ES during learning record meetings. The student, parent, ES or tutor should check the assignments regularly for completion and understanding.

Some of the assignments will involve online learning activities. The grades earned in assigned learning activities will become part of the student's grade.

Own It! How to Add Your Name and Date to an Assignment

GRADE:	out of 10	
Species Sele	ection	
a-g CTE Ani	mal Science 1A	
Species Mar	nagement, Produc	tion & Marketing Guide
Name:		
Date:		

Don't forget to add your Name and Date, to your assignments!

- It is important to be in the habit of **taking ownership of your work**.
- How? Just double click in the header section of the google doc and add your name and date.
- It will update the name and date on all pages for you.

Late Work

Weekly modules for each unit open on Monday mornings at 12:01am and assignments are due the following Tuesday at 11:59pm.

Based on your learning styles, you may choose how to complete your assignments. You may approach each week like a marathon and spread out your assignments by doing one or two each day, slow and steady (recommended). Or, perhaps you prefer to approach each week like a sprint and do all of your weekly assignments in one or two longer study sessions, fast and focused. Then again, you may mix and match your pace approach, depending on your school and personal schedule each week.

Please remember, combined with a-g completion (15 a-g courses) OR a 1-semester community college course CTE pathway completion (2 courses in the same pathway) helps meet your college and career readiness graduation requirement, so your academic performance is important for your high school transcript. However, if, due to unforeseen circumstances you need more time to complete your assignments for any week, please email me to let me know.

Assignment submission opportunities will close for each unit, one week following the final module's due date. Late work will NOT be given full credit. Assignments will incur late penalties after the due date. For example, late assignments will have 1% deducted for every day late. Every day an assignment is late, the

grade is reduced by 1%. Lowest possible grade is 80% of the percentage scored (so if you received a 90 out of 100 possible, and it was 20 days late, the score would be 72. At 21 days late it is a permanent 0. **No late penalties for any assignments until after the add/drop deadline.**

Extra credit assignments may be offered at the discretion of the course instructor.

Attendance and Participation

The class will meet once per week for an online Conference via BigBlueButton. The class link can be found on the class Canvas website. **Attendance** for our live online class is taken by BigBlueButton, showing what time you arrive, what time you leave and how much engagement / participation you have, so be sure to arrive *at least 5 minutes early* to make sure your device is working properly! Your instructor will then log your attendance in SIS and alert your ES of any unexcused absences.

Attendance is required. The <u>Truancy Policy</u> applies to Canvas courses. An unexcused absence may be counted as a truancy. **Attendance credit will not be given for unexcused absences.**

- **Excused Absence** is defined as: The parent or ES shall notify the teacher by phone or email of the absence at least 24 hours* prior to the time the class meets.
- **Unexcused Absence** is defined as: An absence that does not accompany a parent or ES email or phone call to the instructor at least 24 hours* prior to the time the class meets.

*If there are extenuating circumstances that do not allow for at least 24 hours, then the teacher must still be notified prior to the start of class; allowances may be made depending on the circumstances. Examples of extenuating circumstances: car accident, sudden illness, etc. Students should arrange a "back up plan" in case of unexpected computer problems the day of the class (i.e. make pre-arrangements to go to a neighbor, friend, relative, library, etc.)

Not only will the students receive instruction during these sessions, but they will participate in class activities and discussions. Students may be asked to enter a response to an "Exit Ticket" or other attendance activities to earn attendance credit for that day's class. This gives the instructor an opportunity to identify strengths and weaknesses of the students and identify concepts that need more instruction. 0-5 points will be earned for each class session, depending on promptness, participation in the class session, and response to the Exit Ticket.

Making Up a Missed Class

Attendance credit for excused absences will be granted by the instructor based on the quality of the make-up work. To make up for a missed class session, the student must view the recording of the session (which will be posted as a link on the Canvas website shortly after the session ends). The student must then complete the Exit Ticket by the end of the week.

Formative Assessments

The instructor will collect and grade several assessments throughout the semester. The assessments will be posted in Canvas for the students to complete online. Specific instructions for the assessments will be given in Canvas, including procedures for submission and due dates. **Due dates will be posted for each assessment on the Canvas assignment page.** Late submissions will not be accepted without a request for extension BEFORE the due date. Students may retake assessments to improve their grade.

Summative Final Project

A comprehensive final project and discussion review worth 25% of the overall grade will be generated by the instructor each semester. Details of the semester project and extra credit will be given in class.

Pacing Guide

Pacing guide is subject to change. Updates will be made in Canvas.

Mrs. Weston's Class Rules

#1: **Be Kind**: No put-downs, mean, rude, or inappropriate comments

#2: **Be Polite**: Be on time to class, use please and thank you, raise your hand, don't interrupt, wait your turn

#3: Be Respectful: Of others' ideas, opinions and beliefs, be present

#4: Be Honest: No plagiarism, cheating, shortcuts, give/receive honest feedback

#5: **Be Positive**: Keep an open-minded perspective and willing attitude, avoid criticism

#6: **Be Tech-Savvy**: Use your technology to capture/complete coursework (discussions, notes, assignments, assessments), not as a distraction

#7: **Be a Teamplayer**: Assume positive intentions; Consider others' needs, motivations and skills when offering help or advice; Guard against behaviors: degrading, withdrawing, avoiding, or having side conversations. If something is not working for you, take responsibility to share and we will jointly find a beneficial alternative

Online Meeting / Conference Norms:

- Be ready to begin class by 5 minutes prior to class start time: **11:30am**, sharp
- Stay muted throughout the class meeting unless you are speaking
- The **chat** is being recorded at all times, and any inappropriate chats will be reported to parents and administration.
- On-Camera Expectation: ALL students are required to be on camera during the entire session.
 Students are only visible to their instructor and do not appear on the session recording. Video
 MUST be turned on with face showing and limited background distractions.
- All participants should be sitting with their computer, not in a car or on a cell phone, unless prior approval is received from your teacher.
- Press 'Stop Video' if you must walk away from your screen during the class to prevent disruptions, then press 'Start Video' when you return
- Prepare to give your instructor and classmates your full attention by refraining from checking emails, texting, taking phone calls, etc.

Important Dates 2025-2026

(2025-2026 School Calendar)

Fall 2025

- August 11, 2025 First day of school
- August 18, 2025 First day of classes
- September 1, 2025 Labor Day
- October 23-24, 2025 Non School Days
- November 11, 2025 Veterans Day
- November 21-28, 2025 Thanksgiving Break

- December 8-12, 2025 A-G Finals (tentative)
- December 19, 2025 Last Day of Semester 1

Spring 2026

- January 6, 2026 First Day of Semester 2
- January 19, 2025 MLK Day
- February 13 & 16, 2026 Presidents Day
- March 20-27, 2026 Spring Break
- April 13-17, 2026 Likely CAASPP (tentative)
- May 11-15, 2026 A-G Finals (tentative)
- May 22, 2026 Last Day of School

2122 a-g CTE Animal Science A (High School - Section 1) Instructor: J Weston Online FALL Tentative Pacing Guide

(daily assignments subject to change - check Canvas regularly)

Textbooks:

ASPPMS = Animal Science: Principles of Production, Management, and Selection SASC = Small Animal Science and Care

Week 0	Objectives & Standards*	Instructional Activities
Unit 1: Introduction to Animal Science Industry, Careers and Scientific Method	School begins! CA CTE Agriculture and Natural Resources Sector Knowledge and Performance Anchor Standards and California Standards for Career Ready Practice	To-Do Before You Begin Read the course syllabus to prepare for the Orientation Unit Course Information Quiz Complete the "Canvas at Connecting Waters Student & Family Training Course" and share your certificate w/ your ES Make sure you have a computer with headset and other class materials Enroll in our Canvas course Orientation Activities Quiz: Course Information Discussion: Introduce Yourself Read & Quiz: ASPPMS: Ch 2: Careers in the Animal Industry SASC Ch: 3 Employment Skills Assignment: Interest Inventory & Careers
Week 1	Objectives & Standards*	Instructional Activities
Unit 1: Introduction to Animal Science Industry, Careers and Scientific Method	Our ONLINE class sessions begin THIS Wednesday! CA CTE Agriculture and Natural Resources Sector Knowledge and Performance Anchor Standards and California Standards for Career Ready Practice	Prepare: Read & Quiz: ASPPMS: Ch 1: Animals and Society ASPPMS: Ch 48: Companion Animal Industry Overview Participate: Apply your learning: Assignment: Career Plan Discussion: Career Plan Presentations Reflect: Exit Ticket 1.1

Week 2	Objectives & Standards*	Instructional Activities
Unit 1: Introduction to Animal Science Industry, Careers and Scientific Method	CA CTE Agriculture and Natural Resources Sector Knowledge and Performance Anchor Standards and California Standards for Career Ready Practice	Prepare: Read & Quiz: SASC: Ch 1: Small Animal Industry SASC: Ch 5: Small Animals in Society Participate: Apply your learning: Discussion: Career Information Interview - Preparation Assignment: Career Informational Interview - Part A Reflect: Exit Ticket 1.2
Week 3	Objectives & Standards*	Instructional Activities
Unit 1: Introduction to Animal Science Industry, Careers and Scientific Method	CA CTE Agriculture and Natural Resources Sector Knowledge and Performance Anchor Standards and California Standards for Career Ready Practice	Prepare: Read & Quiz: ASPPMS: Ch 12: Animal Science and the Scientific Method Participate: Apply your learning: Assignment: Career Informational Interview - Part B Discussion: Career Informational Interview - Reflection Class Activity: Scientific Method: Modifying Small Animal Behavior Presentation: Animal Scientist Spotlight Reflect: Exit Ticket 1.3
Week 4	Objectives & Standards*	Instructional Activities
Unit 1: Introduction to Animal Science Industry, Careers and Scientific Method	Add/Drop Date: Last day to add or drop classes CA CTE Agriculture and Natural Resources Sector Knowledge and Performance Anchor Standards and	Prepare: Learn by Doing: Create Your Foundational Supervised Agricultural Experience (SAE) Log Participate: Apply your learning: Lab Activity: Animal Behavior Observations (Ethogram)

	California Standards for Career Ready Practice	 □ Discussion: Animal Behavior Observations (Ethogram) - Conclusions □ Presentations: Your Turn to Teach - SAMPLE PRESENTATION - TAG Reflect: □ Exit Ticket 1.4 □ Unit 1: Let's Get Organized: ASCI 1 - Student Portfolio
Week 5	Objectives & Standards*	Instructional Activities
Unit 2: Animal Behavior, Safe Handling and Housing	D1.0 Evaluate the necessary elements for proper animal housing and animal-handling equipment.	Prepare: Read & Quiz: ASPPMS: Ch 10: Safely Handling Animals Learn by Doing: Species Management, Production & Marketing Guide - SPECIES SELECTION Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Interpreting Animal Behaviors and Executing Protocols for Safe Handling of Animals Assignment: Ideal Animal Facility - Part A Reflect: Exit Ticket 2.5
Week 6	Objectives & Standards*	Instructional Activities
Unit 2: Animal Behavior, Safe Handling and Housing	D1.1 Design an animal facility focusing on appropriate space and location requirements for habitat, housing, feed, and water. D1.2 Select habitat and housing conditions and materials, such as indoor and outdoor housing, fencing materials, air flow/ventilation, and shelters, to meet the needs of various animal species.	Prepare: Read & Quiz: SASC: Ch 2: Safety, Handling, and Housing Learn by Doing: Species Management, Production & Marketing Guide - SPECIES SELECTION Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Animal Housing Research Findings and Design Recommendations Assignment: Ideal Animal Facility - Part B Reflect: Exit Ticket 2.6

Week 7	Objectives & Standards*	Instructional Activities
Unit 2: Animal Behavior, Safe Handling and Housing	D1.3 Interpret animal behaviors and execute protocols for safe handling of animals.	Prepare:
Week 8	Objectives & Standards*	Instructional Activities
Unit 2: Animal Behavior, Safe Handling and Housing	D1.4 Defend the purpose and the safe and humane use of animal husbandry tools, such as hoof trimmers, electric shears, elastrators, dehorning tools, and scales.	Prepare:
Week 9	Objectives & Standards*	Instructional Activities
Unit 3: Animal Welfare	D9.0 Assess animal welfare concerns and management practices that support animal welfare.	Prepare: KWL - Field Trip - Preparation Read & Quiz: ASPPMS: Ch 11: Animal Welfare Learn by Doing: Species Management, Production & Marketing Guide - SPECIES SELECTION Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Current Events - Animal Welfare and Animal Rights

		☐ Assignment: Letter to the Editor - Part A Reflect: ☐ Exit Ticket 3.9
Week 10	Objectives & Standards*	Instructional Activities
Unit 3: Animal Welfare	D9.1 Evaluate the early warning signs of animal distress and how to rectify the problem. D9.2 Discuss consumer concerns with animal production practices relative to human health.	Prepare: Read & Quiz: SASC: Ch 4: Animal Welfare and Animal Rights Learn by Doing: Species Management, Production & Marketing Guide - SPECIES SELECTION Supervised Agricultural Experience (SAE) Participate: Apply your learning: Assignment: Letter to the Editor - Part B Discussion: Letter to the Editor - TAG Critiques Reflect: KWL - Field Trip - Conclusions Exit Ticket 3.10
Week 11	Objectives & Standards*	Instructional Activities
Unit 3: Animal Welfare	D9.3 Summarize federal and state animal welfare	Prepare:
	laws and regulations, such as those dealing with abandoned and neglected animals, animal fighting, euthanasia, and medical research.	□ Learn by Doing: □ Species Management, Production & Marketing Guide □ Supervised Agricultural Experience (SAE) Participate: Apply your learning: □ Discussion: Field Trip - Conclusions □ Lab Activity: Animal Welfare Research Analysis & Review □ Animal Scientist Spotlight: Dr. Kelly Walton, DVM □ Your Turn To Teach: Student Presentation Guidelines & Rubric SIGN UP! Reflect: □ Exit Ticket 3.11

Unit 3: Animal Welfare	D9.4 Research the regulations for humane transportation and harvesting of animals, such as those delineated by the U.S. Department of Agriculture (USDA) Food Safety and Inspection Service and the Humane Methods of Slaughter Act.	Prepare: Learn by Doing: Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Animal Welfare Research Analysis & Review - Conclusions Presentations: Your Turn to Teach Your Turn To Teach - Peer Reviews & TAG Critiques Reflect: Exit Ticket 3.12 Unit 3: Let's Get Organized: ASCI 1 - Student Portfolio
Week 15	Objectives & Standards*	ilisti uctional Activities
Unit 4: Health and Disease	D6.0 Prescribe and implement a prevention treatment program for animal diseases, parasites, and other disorders. D6.1 Evaluate the signs of normal health in contrast to illness and disease. D6.2 Analyze the importance of animal behavior in diagnosing animal sickness and disease. D6.3 Research common pathogens, vectors, and hosts that cause disease in animals. D6.4 Evaluate preventative measures for controlling and limiting the spread of diseases, parasites, and disorders among animals. D6.5 Discuss procedures used at the local, state, and national levels to ensure	Prepare: ASPPMS: Ch 4: Maintaining Animal Health Learn by Doing: Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Kennel Cough: Will your dog be "lucky" at Lucky Dog Pet Resort? Assignment: FINAL PROJECT: Wanted: Prevalent Pathogen - Part A Reflect: Exit Ticket 4.13

	biosecurity of the animal industry. D6.6 Explain the health risk of zoonotic diseases to humans, their historical influence, and future implications. D6.7 Discuss the impacts on local, national, and global economies, as well as on consumers and producers, when animal diseases are not appropriately contained and eradicated.	
Week 14	Objectives & Standards*	Instructional Activities
Unit 4: Health and Disease	D8.0 Explain challenges associated with animal waste management. D8.1 Assess treatment and disposal management systems for animal waste. D8.2 Compare various methods for using animal waste and the environmental impacts associated with each method. D8.3 Research the health and safety regulations that are an integral part of properly managed animal waste systems.	Prepare: Read & Quiz: SASC: Ch 6: Health and Disease Learn by Doing: Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Prevalent Pathogens Who cares? Assignment: FINAL PROJECT: Wanted: Prevalent Pathogen - Part B Reflect: Exit Ticket 4.14
Week 15	Objectives & Standards*	Instructional Activities
Unit 4: Health and Disease	D7.0 Explore common pasture and rangeland management practices and their impact on a balanced ecosystem.	Prepare: ☐ Learn by Doing: ☐ Species Management, Production & Marketing Guide ☐ Supervised Agricultural Experience (SAE)

	D7.1 Evaluate a rangeland and identify methods of rangeland improvement used in an effective animal production program. D7.2 Summarize how rangeland management practices affect pasture production, erosion control, and the general balance of the ecosystem. D7.3 Develop a management plan for rangelands, including how to calculate carrying capacity, for a variety of animal species and locations. D7.4 Evaluate a plan to balance rangeland use for animal grazing and for wildlife habitat.	Participate: Apply your learning: Animal Scientist Spotlight: Ashley Kane, RVT on Infection Control Discussion: Zoonotic Disease Outbreaks Near You? Lab Activity: FINAL LAB ACTIVITY: Dog Park Disease Transmission Mystery - Part A + Part B + Part C) Reflect: Exit Ticket 4.15
Week 16	Objectives & Standards*	Instructional Activities
Unit 4: Health and Disease		Prepare: Learn by Doing: n/a Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Dog Park Disease Transmission Mystery - Conclusions Presentations: Your Turn to Teach Your Turn To Teach - Peer Reviews & TAG Critiques Reflect: Exit Ticket 4.16 Quiz: Semester 1 Mega-Quiz (OPEN BOOK) Unit 4: Let's Get Organized: ASCI 1 - Student

Week 17	Objectives & Standards*	Instructional Activities
Semester 1: Wrap-Up	FINALS WEEK Last week of school before winter break!	Prepare: ☐ Good luck on your a-g finals! There is NO proctored final for this class. Only your FINAL PROJECT, FINAL LAB ACTIVITY and Mega-Quiz (these important items are 25% of your grade).
Week 18	Objectives &	
WEEK 10	Objectives & Standards*	Instructional Activities

2022.2 a-g CTE Animal Science B (High School - Section 1) Instructor: J Weston Online SPRING - Tentative Pacing Guide

(daily assignments subject to change - check Canvas regularly)

Textbooks:

ASPPMS = Animal Science: Principles of Production, Management, and Selection SASC = Small Animal Science and Care

Week 0	Objectives & Standards*	Instructional Activities
Unit 5: Animal Anatomy and Physiology	Spring semester begins! Our ONLINE class sessions begin THIS Wednesday! D3.0 Apply principles of comparative anatomy and physiology to uses within various animal systems.	Prepare: Read & Quiz: ASPPMS: Ch 3 Anatomy and Physiology Learn by Doing: Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE)

		Participate: Apply your learning: Discussion: Does winter weather affect anatomy & physiology? Assignment: Reflect: Exit Ticket 5.0
Week 1	Objectives & Standards*	Instructional Activities
Unit 5: Animal Anatomy and Physiology	D3.0 Apply principles of comparative anatomy and physiology to uses within various animal systems.	Prepare: Read & Quiz: SASC: Ch 8: Digestive Systems Learn by Doing: Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Assignment: Smile! Dental Formulas and Identification - Part 1 Reflect: Exit Ticket 5.1
Week 2	Objectives & Standards*	Instructional Activities
Week 2 Unit 5: Animal Anatomy and Physiology		Prepare: Read: Species-specific chapter(s) in ASPPMS and/or SASC - TBD Learn by Doing: Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Assignment: Smile! Dental Formulas and Identification - Part 2 Reflect: Exit Ticket 5.2
Unit 5: Animal Anatomy and	Standards* Add/Drop Date: Last day to add or drop classes D3.1 Compare and contrast animal cells, tissues,	Prepare: Read: Species-specific chapter(s) in ASPPMS and/or SASC - TBD Learn by Doing: Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Assignment: Smile! Dental Formulas and Identification - Part 2 Reflect:

Anatomy and Physiology	consistently high-quality animals that are well suited for their intended purposes.	☐ Species Management, Production &
Week 4	Objectives & Standards*	Instructional Activities
Unit 6: Food Science and Nutrition	D3.3 Relate the importance of animal organs to the health, growth, and reproduction of animals.	Prepare: Read & Quiz: ASPPMS: Ch 5: Feeds and Feeding Learn by Doing: STEM Project Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: STEM Project Assignment: STEM Project Planner Presentations: Your Turn to Teach Your Turn To Teach - Peer Reviews & TAG Critiques Reflect: Exit Ticket 6.4
Week 5	Objectives & Standards*	Instructional Activities
Unit 6: Food Science and Nutrition	D2.0 Apply principles of animal nutrition to ensure the proper growth, development, reproduction, and economic production of animals. D2.1 Assess the flow of nutrients from the soil, through the animal, and back to the soil.	Prepare: Read & Quiz: SASC: Ch 7: Small Animal Nutrition Learn by Doing: STEM Project Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Comparative Digestion Shortcomings and Feeding Requirements Assignment: Comparative Digestion - Part A

		Reflect: Exit Ticket 6.5
Week 6	Objectives & Standards*	Instructional Activities
Unit 6: Food Science and Nutrition	D2.3 Compare the digestive processes of the ruminant, monogastric, avian, and equine digestive systems.	Prepare: Learn by Doing: STEM Project Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Comparative Digestion Applied Assignment: Comparative Digestion - Part B Reflect: Exit Ticket 6.6
Week 7	Objectives & Standards*	Instructional Activities
Unit 6: Food Science and Nutrition	D2.2 Explore the principles for providing proper, balanced rations for a variety of production stages in ruminants and monogastrics. D2.4 Distinguish how animal nutrition is affected by the digestive, endocrine, and circulatory systems.	Prepare: Learn by Doing: STEM Project Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Balancing Rations and Investigation of Applied Nutrition Lab Activity: Balanced Rations, Balanced Nutrition Reflect: Exit Ticket 6.7 Unit 6: Let's Get Organized: ASCI 1 - Student Portfolio
Week 8	Objectives & Standards*	Instructional Activities
Unit 7: Genetics, Inheritance	D5.0 Discuss animal inheritance and selection principles, including the structure and role of	Prepare: Read & Quiz: ASPPMS: Ch 6: Genetics SASC: Ch 9: Genetics and Inheritance

and Reproduction	deoxyribonucleic acid (DNA). D5.1 Evaluate a group of animals for desired qualities, and discern among them for breeding selection. D5.2 Select animals, based on quantitative breeding values, for specific characteristics. D5.3 Research and discuss current technology used to measure desirable traits.	□ Learn by Doing: □ STEM Project □ Species Management, Production & Marketing Guide □ Supervised Agricultural Experience (SAE) Participate: Apply your learning: □ Discussion: Reproducing Desired Qualities & Methods of Evaluation □ Presentations: Your Turn to Teach □ Your Turn To Teach - Peer Reviews & TAG Critiques Reflect: □ Exit Ticket 7.8
Week 9	Objectives & Standards*	Instructional Activities
Unit 7: Genetics, Inheritance and Reproduction	understanding of animal reproduction, including the function of reproductive organs. D4.1 Illustrate animal conception, including estrus cycles, ovulation, and insemination. D4.2 Research the gestation process and basic fetal development. D4.3 Explain the parturition process, including the identification of potential problems and their solutions.	Prepare: Read & Quiz: ASPPMS: Ch 7: Reproduction and Parturition SASC: Ch 10: Reproduction Learn by Doing: STEM Project Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Impact of Selective Breeding on Genetics and Conservation Reflect: Exit Ticket 7.9
Week 10	Objectives & Standards*	Instructional Activities
Unit 7: Genetics, Inheritance and Reproduction	D5.4 Predict phenotypic and genotypic results of a dominant and recessive gene pair. D5.5 Research the role of mutations, both naturally	Prepare: ☐ Learn by Doing: ☐ STEM Project ☐ Species Management, Production & Marketing Guide ☐ Supervised Agricultural Experience (SAE)

	occurring and artificially induced, and hybrids in animal genetics.	Participate: Apply your learning: Discussion: Ethical Considerations in Modern Breeding Practices Assignment: Natural Selection vs. Emerging Technologies in Genetics and Reproduction Part A + Part B Reflect: Exit Ticket 7.10
Week 11	Objectives & Standards*	Instructional Activities
Unit 7: Genetics, Inheritance and Reproduction	D4.4 Select animal breeding methods based on reproductive and economic efficiency. D4.5 Select a breeding system based on the principles of genetics.	Prepare: Learn by Doing: STEM Project Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Emerging Technologies in Genetics and Reproduction Poster/Pamphlet Networking Event Discussion: Balancing Desirable Phenotype for Environment with Breeder Sustainability and Marketing Lab Activity: Pick of the Litter: Predicting Genotype and Phenotype with Punnett Squares Reflect: Exit Ticket 7.11 Unit 7: Let's Get Organized: ASCI 1 - Student Portfolio
Week 12	Objectives & Standards*	Instructional Activities
	CAASPP Testing	NO class, NO assignments
Week 13	Objectives & Standards*	Instructional Activities
Unit 8: Production Management	D12.0 Understand how animal products and	Prepare: ☐ Read & Quiz:

and Marketing	by-products are processed and marketed. D12.1 Research animal harvest, carcass inspection and grading, and meat processing safety regulations and practices and the removal and disposal of nonedible by-products, such as those outlined in Hazard Analysis and Critical Control Point, Sanitation Standard Operating Procedures, and good manufacturing practices documents. D12.2 Compare the relative importance of the major meat, dairy, and egg classifications, including the per-capita consumption and nutritive value of those classifications. D12.3 Discuss how meat-based, dairy, and egg retail products are produced.	□ ASPPMS: Ch 8: Food and Fiber Products from Animals □ Learn by Doing: □ STEM Project □ Species Management, Production & Marketing Guide □ Supervised Agricultural Experience (SAE) Participate: Apply your learning: □ Discussion: Species Management, Production & Marketing - Large and Small Animals - Compare and Contrast □ Assignment: FINAL PROJECT: Species Management, Production & Marketing Guide Report and Slide Deck - Part A □ Presentations: Your Turn to Teach □ Your Turn To Teach - Peer Reviews & TAG Critiques Reflect: □ Exit Ticket 8.13
Week 14	Objectives & Standards*	Instructional Activities
Unit 8: Production Management and Marketing	D12.4 Describe how non meat products, such as wool, pelts, hides, and by-products, are harvested and processed. D12.5 Evaluate how meat products and non meat products are marketed. D12.6 Compare the value of animal by-products to nonagricultural industries. D12.7 Apply point-of-origin safety and sanitation procedures in the	Prepare: Read & Quiz: ASPPMS: Ch 9: By-Products from Animals Learn by Doing: STEM Project Species Management, Production & Marketing Guide Supervised Agricultural Experience (SAE) Participate: Apply your learning: Discussion: Species Management, Production & Marketing Guide Broader Understanding and Future Role

	production, harvest, handling, processing, and storing of meat products.	 □ Assignment: FINAL PROJECT: Species Management, Production & Marketing Guide Report and Slide Deck - Part B Reflect: □ Exit Ticket 8.14
Week 15	Objectives & Standards*	Instructional Activities
Unit 8: Production Management and Marketing	understanding of the production of large animals (e.g., cattle, horses, swine, sheep, goats) and small animals (e.g., poultry, cavy, rabbits). D10.1 Formulate and implement optimum requirements for diet, genetics, habitat, and behavior in the production of large and small animals. D10.2 Develop, maintain, and use growth and management records for large or small animals to make data-driven management decisions.	Prepare: Learn by Doing: STEM Project Planner - DUE! Supervised Agricultural Experience (SAE) - FINAL UPDATE & SUBMISSION Participate: Apply your learning: Discussion: Volunteer, Internship, Training/Education, Paid Work, Fieldtrip Contacts Lab Activity: FINAL LAB ACTIVITY: STEM Project Report and Slide Deck Discussion: STEM Project - Online Science Fair! Reflect: Exit Ticket 8.15
Week 16	Objectives & Standards*	Instructional Activities
Unit 8: Production Management and Marketing	understanding of the production of specialty animals (e.g., fish, marine animals, llamas, and tall, flightless birds). D11.1 Assess specialty animals' role in agriculture (e.g., fish farms, pack animals, working dogs). D11.2 Explore the unique nutrition, health, and habitat	Prepare: Learn by Doing: Google Classroom: Connections, Places and Spaces! Participate: Apply your learning: Discussion: Species Management, Production & Marketing Guide Expo Presentations: Your Turn to Teach Your Turn To Teach - Peer Reviews & TAG Critiques Reflect: Quiz: Semester 2 Mega-Quiz (OPEN BOOK)

	requirements for specialty animals. D11.3 Synthesize and implement optimum requirements for diet, genetics, habitat, and behavior in the production of specialty animals. D11.4 Develop, maintain, and utilize growth and management records for specialty animals to make data-driven management decisions.	 □ Unit 8: Let's Get Organized: ASCI 1 - Student Portfolio □ Mrs. Weston's CTE Animal Science - Semester Course Evaluation □ Spring Canvas Class Survey
Week 17	Objectives & Standards*	Instructional Activities
	FINALS WEEK	Prepare:
		☐ Good luck on your a-g finals! There is NO proctored final for this class. Only your FINAL PROJECT, FINAL LAB ACTIVITY, FINAL UPDATED SAE LOG and Mega-Quiz (these important items are 25% of your grade).
Week 18	Objectives & Standards*	proctored final for this class. Only your FINAL PROJECT, FINAL LAB ACTIVITY, FINAL UPDATED SAE LOG and Mega-Quiz (these

^{*}Standards introduced, implemented and integrated throughout the course:

<u>CA CTE Agriculture and Natural Resources Sector Knowledge and Performance Anchor Standards and California Standards for Career Ready Practice</u>

<u>California Career Technical Education Model Curriculum Standards</u>
<u>Agriculture and Natural Resources Pathway Standards: D. Animal Science Pathway</u>