# EL DORADO UNION HIGH SCHOOL DISTRICT EDUCATIONAL SERVICES Course of Study Information Page

COURSE TITLE  Honors Human Ana	atomy and Physiology				
DISTRICT COURSE NUMBER 0314		4-DIGIT STATE (	COURSE CODE (COMPLETED BY SILT)		
Rationale:	related careers in mind suc	This course was designed with students interested in health and life science related careers in mind such as becoming a physician, nurse, EMT, kinesiology, sports medicine doctor or physical therapist.			
Course Description that will be in the Course Directory:	This course focuses on the biochemistry, anatomy, and physiology of the human body. Cells, tissues, organs, and organ systems will be studied. Some dissection will be expected as well as use of simulations, lab demonstrations, pathologies and activities that require students to use mathematical and computational thinking, asking and defining problems, developing and using models, analyzing and interpreting data to construct explanations and design solutions. Students will engage in argument from evidence, and obtain, evaluate, and communicate information.				
How Does this Course align with or meet State and District content standards?	Honors Anatomy and Physiology covers anatomy with an emphasis in human physiology. The twelve systems of the human body are covered in depth so that students understand the complex interactions and intricacies of the body.				
NCLB Core Subjects:	Select up to two that apply:  Arts Civics and Government Not Core Subject Economics History English Mathematics Foreign Language Reading / Language Arts Geography X Science				
CDE CALPADS Course Descriptors:  (See Page 2 for Definitions)	CTE TECH PREP COURSE INDICATORS  Tech Prep (32) (Higher Ed) Tech Prep & ROP(33) (Higher Ed) ROP (30) X N/A	CTE COURSE CONTENT CODI  CTE Introductory (01)  CTE Concentrator (02)  X CTE Completer (03)  Voc Subject  N/A	INSTRUCTIONAL LEVEL CODE  ☐ Remedial (35)  X Honors UC-Certified (39)  ☐ Honors Non UC-Certified (34)  ☐ College (40)  ☐ N/A		
Length of Course:	X Year □ Semester				
Grade Level(s):	□9 □10 X 11	X 12			
Credit:	X Number of credits: <u>10</u> ☐ Meets graduation requirement X Request for UC "a–g" require CSU/UC requirement <u>d</u>		X College Prep		
Prerequisites:	Grade of B or better in Biolo Grade B or better in Algebra				

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Department(s):	Science
District Sites:	May be offered at any site
Board of Trustees COS Adoption Date:	NA
Textbooks / Instructional Materials:	Human Anatomy and Physiology, Pearson Publishing, Elaine N. Marieb and Katja Hoehn, 2016 - 10th edition, ISBN: 978-0-321-92704-0
Funding Source:	General Fund
Board of Trustees Textbook Adoption Date:	May 9, 2017

# **Definitions**

CALPADS	California Longitudinal Pupil Achievement Data System
CTE Technical Prep	A course within a CTE technical career pathway or program that has been articulated with a postsecondary education or through an apprenticeship program of at least 2 years following secondary instruction.
Instructional Level Code	Represents a nonstandard instructional level at which the content of a specific course is either above or below a 'standard' course instructional level. These levels may be identified by the actual level of instruction or identified by equating the course content and level of instruction with a state or nationally recognized advanced course of study, such as IB or AP.
Instructional Level Honors, UC Certified	Includes all AP courses.
Instructional Level Honors, non UC Certified	Requires Board approval.
Instructional Level College	Includes ACE courses. Equivalent to college course and content, but not an AP course. Not related to section, but to course.

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# **EDUCATIONAL SERVICES**

# **Course Title: Honors Human Anatomy and Physiology**

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HS-LS1-7	Unit 5: Muscular System: The cellular and molecular basis of muscle contraction, including the roles of actin, myosin, Ca <sup>+2</sup> , and ATP.	8
HS-LS1-2	Unit 6: Skeletal System: How the complementary activity of major body systems provides cells with oxygen and nutrients.	9
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HS-LS1-3	Unit 9: Respiratory System: How the complementary activity of major body systems provides cells with oxygen And nutrients and removes toxic waste products such as carbon dioxide.	12
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# **EDUCATIONAL SERVICES**

Department:	Science			
Course Title:	Honors Human Anatomy and Physiology	Course Number:	0314	
Unit Title:	Unit 1: Introduction to Physiology:	<del></del> ,		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-3:HS-LS1-3. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

Students will review the key terms, roots, prefixes, and suffixes in anatomy and physiology with an in depth study comparing regional and directional terms of body parts. It is expected students will already have an understanding of the basic human body plan including planes, cavities, membranes, and abdominopelvic quadrants and regions. Students will describe the levels of organization in the human body and identify the characteristics and necessities for life. It is essential that students understand the actions of all human body systems as they work together to promote homeostasis and combat disease. Students will analyze feedback models and their relationship to health and disease. Students will review basic chemistry involving atoms, bonding, and biomolecules essential to the course.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

Students will participate in labs, lecture, activities, etc. to understand the relationships that exist between this and all systems with the human body.

- Anatomical drawings
- Homeostasis Lab
- Organizational diagrams

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Formative: list and explain the 5 principles of the feedback loop.

Summative: diagram a personal experience labeling the 5 principal parts of the negative feedback loop which acted to maintain homeostasis.

**Interventions**: Describe methods used to support students who fail to master unit Formative and Summative assessments. Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science		
Course Title:	Honors Human Anatomy and Physiology	Course Number: 0314	
Unit Title:	Unit 2: Biomolecules and Cytophysiology	<del></del>	

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

HS-LS1-1: Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

As part of the cells and histology unit, students will use the microscope to differentiate types of cells and epithelial, connective, muscle and nervous tissues. Students will understand the function and location of each, analyze the relationships between their structural and functional characteristics. Students will analyze membranes found in tissues and discuss their importance in each system. Students will be able to describe the steps to tissue repair due to mechanical damage, diseases, and disorders. Students discover the effects of diseases and disorders among the membranes and tissues as they connect the systems to their functions.

#### **Instructional Strategies**:

Students will participate in labs, activities, and worksheets that will show student understanding of each system's structure and function including the viewing of histology slides (normal and abnormal). Students will be able to determine the histological significance of each system as well.

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Formative: list healthful pH, CO<sub>2</sub>, O<sub>2</sub> and ion concentration

Summative: given a set of symptoms suffered by a patient, design a set of diagnostic tests, conclude on the patient's condition and recommend a treatment.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# EL DORADO UNION HIGH SCHOOL DISTRICT EDUCATIONAL SERVICES

Department:	Science			
Course Title:	Honors Human Anatomy and Physiology	Course Number:	0314	
Unit Title:	Unit 3: Integumentary System			

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

In the integumentary system, students will identify the layers and structures of the skin as well as accessory organs. They will describe functions of the skin, individual skin cells, and accessory organs and their roles in cooperation with other body systems. Understanding diseases, disorders, and injury such as burns and cancer to the skin and cells is pertinent in this unit.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

Instructional strategies that will be used will include direct instruction supported by hands on activities that will include:

- Dissection
- Organizational diagrams
- Histological examinations
- Sensory Receptor Map Lab.

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm ups, quizzes, homework or investigations. (Formative).

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science			
Course Title:	Honors Human Anatomy and Physiology	Course Number:	0314	
Unit Title:	Unit 4: Nervous System	<u> </u>		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-3: Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

Students will develop an understanding of the nervous system by tracing the pathway of a physical response to electrical and chemical impulse through the brain. Students study neurons, glial cells of the central and peripheral nervous system, cranial and peripheral nerves and reflexes. Students then move on to the sensory system and go into depth about the olfactory, auditory, gustatory, visual, cutaneous, kinesthetic, vestibular, and organic senses.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

- Diagram the principle divisions and parts of the nervous system
- Brain dissections
- Cat dissections of nervous system
- · Right and Left brain testing
- Cranial Nerve Lab
- Taste Bud Lab
- Vision and hearing lab
- Eyeball dissection
- Research on brain disorders
- Effects of drugs on this system

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Formative: diagram the principle divisions and parts of the nervous system

Summative: explain to a patient who has suffered severe injury to his/her PNS and CNS divisions why he will regain movement in his PNS and not CNS.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments. Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science		
Course Title:	Honors Human Anatomy and Physiology	Course Number:	0314
Unit Title:	Unit 5: Muscular System		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-7: Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

For the muscular system, students will continue their studies of function, location, and structure of muscles and tendons. Students will describe the physiology of muscle contraction and the pathways cells take to make ATP. Students will identify a select set of muscles including their functions, origin and insertion.

Students will produce a set of worksheets identifying and describing the role of muscles in the body.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

Students will participate in labs, activities, worksheets, etc. that will help in identifying and describing the role of muscles in the body.

- Microscope slides of the muscle tissue
- Fatigue and strength exercises
- Reflex lab
- Cat dissection
- Muscle activity lab

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding including quizzes, homework, labs, activities...

Diagram and label the principle parts of the myoneural junction along with the major parts of the sliding filament theory.

Explain how ion flow and ATP relate to the length of time rigor mortis sets in and lasts.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments. Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science		
Course Title:	Honors Human Anatomy and Physiology	Course Number: 0314	
Unit Title:	Unit 6: Skeletal System		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

In the skeletal system, students will identify microscopic and macroscopic anatomy of bone and cartilage. Students will be able to outline the processes of bone and cartilage development, growth and repair, and they physiological functions of bone and cartilage cells. Students will identify the 206 official bones of the axial and appendicular skeletal as well as bone markings and articulations. Students will examine key synovial joints and identify their structural components.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

- Microscope
- Cross reference to endocrine system
- X-rays of various fracture types
- Research diseases that relate to the destruction of bone growth and maintenance
- Bone Decalcification Lab (chicken bone)

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Take a series of quizzes and identify all major bones, joints, muscle attachments, and insertions. (Summative) Explain in detail why injury to the epiphyseal plate, in long bones, before the age of 25 is so serious.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science		
Course Title:	Honors Human Anatomy and Physiology	Course Number: 0314	
Unit Title:	Unit 7: Cardiovascular System		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

Circulatory system goes into heart contractions and traces the pathway of a blood cell from creation through major vessels to and from the heart. Students will also go over blood components (cells and plasma proteins) and the effects of various blood disorders on the body. Students will understand the relationship between blood types and agglutinogens and agglutinins.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

- Blood lab
- Blood typing lab
- Microscope labs
- Heat dissection
- EKG readings and diagnosis
- Cardiac output lab
- Measure blood pressure and heart rate
- Dissection or cardiac system

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Diagram the blood flow through the heart (Summative)

Evaluate a series of irregular EKG readings and diagnose the patient.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments. Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science			
Course Title:	Honors Human Anatomy and Physiology	Course Number:	0314	
Unit Title:	Unit 8: Lymphatic System/Immune System:	<del></del>		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-1: Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

The lymphatic system ends the unit with analyzing the difference between specific and nonspecific defenses and the process of acquired immunity. Students will be able to describe lines of defense of the human immune system and the function of the cells and proteins involved.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

Students create a model tracing the pathway of a cell, metabolite or drug through the circulatory, lymphatic, or other systems that will help them to understand the interconnections between what is commonly called the immune system and the other systems.

- Dissection
- Research history and current use of vaccinations and immunizations

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Research and describe in detail conditions that occur due to an overactive immune system. Diagram the major components of the immune system.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science		
Course Title:	Honors Human Anatomy and Physiology	Course Number:	
Unit Title:	Unit 9: Respiratory System:		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-3: Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

Students follow the flow of air in and out of the organs of the respiratory system and differentiate between breathing, external respiration, internal respiration and cellular respiration. As part of understanding the volumes of the lungs and alveoli and the mechanics of breathing, students will determine their individual lung capacity.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

- Dissection
- Spirometer lab
- Bromothymol blue lab
- Graphing
- · Scuba diving activity

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Diagram the principle part of the respiratory system (Summative)

By traveling on a virtual scuba diving trip, students will determine whether a series of dives are safe by reading Navy dive charts.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science			
Course Title:	Honors Human Anatomy and Physiology	Course Number:	0314	
Unit Title:	Unit 10: Urinary/Excretory System:	<del></del>		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

At the excretory level, students discover the kidneys, nephron, bladder and other accessory organs. Students will understand various disorders and diseases of these systems including anorexia, diverticulitis, and other issues. Students will demonstrate what could go wrong with the delicate balance of the body if it is nutrient deficient or in excess, such as water and fat soluble vitamins.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

- Urinary lab
- Dissection of cat
- Research

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations (Formative).

Diagram the principle parts of the excretory system. (Summative)

Students will be involved in a urinalysis lab to collect data on the effects of caffeine and other beverages on their excretory system

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science			
Course Title:	Honors Human Anatomy and Physiology	Course Number:	0314	
Unit Title:	Unit 11: Digestive System	<del></del>		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

Students tackle the digestive system by discussing the major nutrients need to support life and the importance of each. Students follow the steps food takes through the digestive tract and accessory organs involved in digestive processes (mechanical digestion, chemical digestion, and nutrient absorption. Students will implement, analyze, calculate, and describe their personal diet plan in a formal written report with appropriate citations. Students will show their understanding of human anatomy and physiology by describing how food nutrient calories and how they are processed by the body's systems into energy, vitamins, and minerals.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

- Dissection
- Enzyme lab
- Research digestive system disorders

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework, or investigations. (Formative)

Diagram the principle parts of the digestive system. (Summative)

Research and report on a digestive system disorder.

<u>Interventions</u>: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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# **EDUCATIONAL SERVICES**

Department:	Science		
Course Title:	Honors Human Anatomy and Physiology	Course Number: 0	314
Unit Title:	Unit 12: Reproductive System and Endocrine System:		

<u>Content Area Standards</u> (Please identify the source): List content standards students will master in this unit. HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

<u>Unit Outline</u>: A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

The endocrine system is pertinent to understanding the reproductive system. Being able to identify reproductive organs and the major endocrine glands and their excretions is important to human development. Students will discuss the functions of select hormones and cell signaling as components of maintaining homeostasis and reproduction. Key to understanding human development is being able to explain the physiological events that occur in the male and female reproductive organs and hormones. Students will evaluate the physiological events that occur from conception to death.

<u>Instructional Strategies</u>: Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

Instructional Strategies to include:

- Dissection
- Histology Lab

<u>Assessments</u>: Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

Frequent checks for understanding will be used. These may take the form of warm-ups, quizzes, homework or investigations. (Formative)

Diagram the principle parts of the reproductive system. (Summative)

Compare and contrast the embryological stages of 3 different organisms.

**Interventions**: Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions may include but are not limited to the following:

Teacher will meet with student for additional assistance.

Conference with student and parents to discuss learning strategies.

If a student continues to struggle, a class change may be considered, especially since this is an elective science class. This option would be discussed with the student, counselor and parents.

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