



Dublin Unified School District

Grades 6-12 **COURSE SYLLABUS**

Education that inspires lifelong learning

Course Name: Anatomy and Physiology

Teacher: Alyssa Cook

Learning Platform: [Google Site](#) and [Google Classroom](#)

Grades can be found on Infinite Campus

Textbook name: Essentials of Human Anatomy and Physiology

Teacher email: cookalyssa@dublinusd.org

**Please allow 48 hours (2 school days) for a response.*

Course Specific Information:

I. Introduction

In this class, we will be exploring the human body and the different systems that allow us to survive. We will be learning how homeostasis is maintained and what occurs if we cannot maintain homeostasis. In this class, we will be doing a variety of lectures, online labs, in-person labs, projects, and dissections. Below are the units we will be covering during each semester. It is important to make sure you are in class every day, as we will be learning many new vocabulary words in each class. The course is run like a college course, where the majority of the material will be handled in class, and you are expected to study every night.

II. Materials

- **Backpack**
- **Materials for notes**
- **Colored pencils or pens**

III. Essential Standards (as detailed in the official DUSD [course outline](#))

Unit 1: Anatomical Terms

- Identify the six levels of structural organization of the human body
- Identify directional terminology.
- Discuss the importance of homeostasis in the human body.

Unit 2: Cells and Integumentary System

- Examine the basic principles of chemical elements.
- Identify the basic components of atoms and describe the characteristics of ions, molecules, compounds, and bonds.
- Show the relationship between water, acids, bases, and pH.
- Identify the basic structures and functions of an animal cell.
- Describe the cellular transport processes and classify as active or passive.
- Describe animal cell reproduction
- Identify the characteristics and functions of the four principle types of tissue.
- Differentiate between the four basic types of membranes.
- Compare and contrast exocrine and endocrine glands.

- Describe the basic structures, functions, and diseases and disorders of the integumentary system.

Unit 3: Skeletal System

- Identify the five functions of the skeletal system.
- Compare and contrast compact and spongy bone and the location and function of each.
- Differentiate the axial and appendicular skeletons.
- Describe bone markings, features, location, and names of long, short, flat, and irregular bones of the human body.
- Identify the types of joints, describe the movement of each, and classify as fibrous, synovial, or cartilaginous.
- Compare and contrast tendons and ligaments.
- Describe the diseases and disorders of the skeletal system and the homeostatic imbalance involved with each.

Unit 4: Muscular System

- Identify the general functions of the muscular system.
- Compare and contrast the functional characteristics of muscle tissue.
- Compare and contrast the location, microscopic appearance, type of control (voluntary/involuntary), and functions of the three types of muscle
- Analyze the anatomy and physiology of muscle fibers and describe muscle fiber stimulation.
- Name, locate, and describe the function of major muscles.
- Describe the diseases and disorders of the muscular system and the homeostatic imbalance involved with each

Unit 5: Nervous System

- Identify the major functions of the nervous system.
- Compare and contrast the general organization of the nervous system.
- Describe the structure and function of the two main types of nervous tissue.
- Analyze and sequence the events involved when a nerve impulse is initiated.
- Describe the reflex arc and give examples of reflexes.
- Identify the structures of the brain and explain the function of each.
- Describe the diseases and disorders of the nervous system and the homeostatic imbalance involved with each.

Unit 6: Special Senses

- Compare and contrast general and special senses.
- Identify the anatomical structures of the eye and the physiological function of each structure in regards to the sense of sight.
- Describe the anatomy of the nose and the physiological function of each structure in regards to the sense of smell.
- Discuss the anatomy of the tongue and the physiological function of each structure in regards to the sense of taste.
- Discuss the anatomy of the ear and the physiological function of each structure in regards to the sense of hearing.
- Describe the diseases and disorders of the special senses and the homeostatic imbalance involved with each.

Unit 7: Endocrine System

- Distinguish between endocrine glands and exocrine glands.
- Identify the general functions of the endocrine system.
- Define the term hormone and identify the location of endocrine glands, the hormones secreted, the target organ of each hormone, and the effect of the hormone.
- Describe the diseases and disorders of the endocrine system and the homeostatic imbalance involved with each.

Unit 8: Cardiovascular System

- Identify the components of blood, the structure of each component, and the function of each.
- Explain the phases of hemostasis.
- ABO blood types and Rh factor
- Identify the general functions of the cardiovascular system.
- Describe the structures and functions of the cardiovascular system organs.
- Identify and label the anatomical structures of the heart and trace blood flow through the heart.
- Explain the structures and functions of the conduction system of the heart and trace the pathway.
- Sequence the events of the cardiac cycle, define the term cardiac output, and identify factors that influence it.
- Describe blood pressure, identify the common locations where a pulse is felt, and assess how to take how to measure blood pressure.
- Describe the diseases and disorders of the blood, lymph, and cardiovascular systems and describe the homeostatic imbalance involved with each.

Unit 9: Respiratory System

- Sequence the general structures of the respiratory system and identify their functions
- Identify specific anatomical features of the respiratory organs.
- Describe the physiology of respiration.
- Describe the diseases and disorders of the respiratory system and describe the homeostatic imbalance involved with each.

Unit 10: Lymphatic and Immune Systems

- Describe the structures and functions of the lymphatic organs and explain how lymph moves through the body.
- Compare and contrast antibodies and antigens.
- Identify the roles of T-cells and B-cells in the immune response.
- Distinguish between active and passive immunity and natural and artificial immunity.

Unit 11: Digestive System

- Examine the organs of the alimentary canal, accessory structures, and the general functions of the digestive system.
- Compare and contrast chemical and mechanical digestion and give examples of where each occurs.
- Define common medical terms used in digestive processes.
- Describe the diseases and disorders of the digestive system and describe the homeostatic imbalance involved with each.

Unit 12: Renal and Reproductive Systems

- Examine organs and the general functions of the urinary system.
- Identify the gross and microscopic anatomy of the kidneys.
- Describe the process of urine formation.
- Compare and contrast normal and abnormal constituents of urine.
- Examine the methods of fluid intake and output in regards to fluid balance (homeostatic balance).
- Describe the diseases and disorders of the urinary system and describe the homeostatic imbalance involved with each.
- Examine the general functions of the reproductive system.
- Describe the anatomy and physiology of the male genitalia.
- Describe the anatomy and physiology of the female reproductive structures.
- Examine the menstrual cycle.
- Compare and contrast the processes of spermatogenesis and oogenesis.
- Identify the stages of fetal development and birth.
- Describe the diseases and disorders of the male and female reproductive systems.

IV. Homework:

The purpose of homework is to practice content, review concepts, preview new material, and extend learning. By doing homework, students can determine what they understand well and where they need additional support.

The purpose of homework is to practice content, review concepts, preview new material, and extend learning. By doing homework, students can determine what they understand well and where they need additional support. In this class, the basic nightly homework will be to review the materials that we went over in class for 15- 20 minutes. By doing this nightly, students will be able to retain information and ease their studying before a test or quiz. Other homework will be completing the material we started in class, and should not take longer than 15 minutes unless the student was absent.

Homework can be found: Mrs.Cook’s Website:
<https://sites.google.com/dublinusd.org/mrscooksanatomy/home>

Expected time for completion: 15-20 minutes

If homework is regularly taking longer than 20 minutes, please check your environment for distractions and make sure you have a healthy, productive time. Everything we do in class will be listed on my Google Website. There will be links on the website to all the lectures, notes, classwork, test dates, as well as additional resources if you need more reinforcement. We also have the ARC available if you need additional help beyond what I can provide. Please use this link to access the [ARC](#).

V. DUSD AI Policy:

In alignment with the Dublin Unified School District’s Board Policy and Administrative Regulation on Artificial Intelligence (AI), courses promote the ethical, responsible, and effective use of AI tools. Students may use AI based on the AI Usage Tier their teacher has indicated for the class and/or assignment, as outlined in [Dublin Unified Artificial Intelligence Regulation 0440.01](#). Instructors may incorporate AI into lessons and define appropriate use on assignments based on these tiers to ensure alignment with curriculum goals and academic integrity.

Tier	Type	Guidelines	Examples
1	Open AI Integration	Students may use GenAI without restriction to assist in all phases of the project, including research, drafting, and final production.	A student is able to utilize AI feedback to craft a business pitch task from initial idea to final slide presentation.

2	GenAI Assisted Production	Students may use GenAI to generate initial drafts or refine their own work with <i>transparency and documentation</i>. · Students must document, cite, and share how the AI influenced the final output. · Citations could be done in MLA format or according to the teacher's citation preference and can include submitting GenAI history of prompts	(1) Students can submit personally created work to a Generative AI tool for feedback and possible refinement. (2) Students can submit personally generated programming code for debugging or troubleshooting
3	GenAI Brainstorming & Ideation	GenAI use is limited to the pre-writing phase The final submission of work must reflect 100% student-generated content.	This includes outlining, brainstorming, or identifying primary and secondary sources for research tasks
4	Specific Tool or Specific Assignment Authorization	GenAI use is only permitted for specific tasks explicitly assigned by the instructor.	This is often utilized in AP and CTE Courses to align with specific curriculum standards or career readiness.
5	No Gen AI Use	No GenAI tools are permitted at any stage of the assignment. This tier is essential for evaluating traditional skills, specifically in-class writing and public speaking.	Use of Responsive AI tools, such as spelling and grammar checkers, may be approved by the teacher.

Students should never share personal information (such as names, birthdates, or emails) with AI platforms. For full policy details, visit: [AI Board Policy & Regulation](#).

Course Team: AI can be a tool of use if utilized properly however, it is not something to take the place of complex and ingenious thinking. AI will not be utilized frequently in this course.

VI. Late Work & Absent Work Policies:

Late Work Policy:

- All late work can be turned in for full credit up until the end of the unit. After taking the unit assessment, no late work will be accepted. You may not ask for additional time within the last two weeks of the semester due to constraints of getting grades submitted.

Absences:

If a student is absent (unexcused, excused, or suspended), the student should:

- Students can earn up to full credit for assignments or assessments missed due to excused or unexcused absences if completed within the unit of study. If the absence occurs at the end of the unit of study, students will have the same number of days to make up the work as designated in the teacher's syllabus (BP 5121).
- Students can earn up to full credit for assignments or assessments missed due to excused or unexcused absences if completed within the unit of study. If the absence occurs at the end of the unit of study, students will have the same number of days to make up the work as designated in the teacher's syllabus (BP 5121).
- Absent work can be submitted in person or online, depending on the assignment. If you submit it online, you must email your teacher to notify them that you have turned in your work.
- Students have the ability to turn in any late work for full credit up until the end of the unit. If an absence occurs spanning the end of the unit, students have the same number of days they were out to submit their work.
- If you are absent on the day of an assessment, you are expected to take the assessment in class the next time you are physically present.
- If you are present for all assessments for the semester on the assigned assessment date and make a reasonable attempt on the assessments, regardless of your absence (unexcused, excused, etc.), your teacher will replace your lowest test score with your average test score. If a student knows that they will be absent ahead of time, they must schedule a date ahead of the assigned assessment date and will still be eligible for the replacement of an assessment grade.

Dublin High School Specific Expectations

VII. Code of Conduct

[Dublin High Gael Force Guide 26-27](#)

VIII. Academic Support

- Please email me to set up a time if additional support is needed.
- Support is also available before school, at lunch, after school and during a student's Gael Period at the DHS Academic Resource Center (ARC). For more information, visit [DHS Tutoring](#)

IX. Behavior Expectations



District Specific Information:

X. Statement on observation of religious holidays

As a diverse community, we recognize that our students come from a variety of traditions and that there may be occasions when observation of a holiday conflicts with school. Consistent with our value of respecting and celebrating all our community, we are committed to working with students to extend or reschedule work. In order to receive accommodations, students must inform their teacher in writing, in a timely manner, preferably at the beginning of the quarter.

XII. Grading Criteria

Per Board Policy 5121: "Grades shall be accurate, fair, impartial, transparent, and shall reflect the student's level of mastery towards course content standards."

- To show mastery of standards, will your course-alike team offer assessments through a **variety of methods** (written, multiple choice, project, etc) AND/OR **offer multiple attempts/retakes** if applicable, and is up to the discretion of the teacher.
- Grade Categories & Weights: All assignments are placed in one category in Infinite Campus.
- No extra credit or bonus points will be offered (AR 5121).
- No single project or assignment can be worth more than 30% of a student's overall grade. Any project worth more than 20% must have at least one midpoint check. Semester finals will not exceed 20% of the final grade (AR 5121).
- To create a mathematically sound grading scale, all grade bands (A, B, C, D, and F) shall have a 10% range. If a student scores below 50% on a given assignment, at or before the end of the grading period, the grade shall be input as a 50%.

VII. Grading Scale:

Grade	Percentage Range
A+	96.50% - 100%
A	92.50% - 96.49%
A-	89.50% - 92.49%
B+	86.50% - 89.49%
B	82.50% - 86.49%
B-	79.50% - 82.49%
C+	76.50% - 79.49%
C	72.50% - 76.49%
C-	69.50% - 72.49%
D+	66.50% - 69.49%

- f. Missing assignments will be posted as an “M” in the gradebook. An “M” will be calculated as a “Zero” in the gradebook.
- g. Assignments not given a **reasonable attempt** will be posted as an “N” in the gradebook and will be calculated as a “Zero” in the gradebook.
 - i. Minimal efforts shall not constitute a reasonable attempt. Examples include simply writing one's name on the assignment, answering all questions on a multiple-choice exam with the same letter, doodling, or submitting responses that demonstrate an obvious disregard for instructions and/or assignment criteria. It shall be left to the discretion of the teacher to quantify the attempt as reasonable or unreasonable (AR 5121).

D	62.50% - 66.49%
D-	59.50% - 62.49%
F	50.00% - 59.49%

Please sign this virtual syllabus instead of a physical syllabus:

I have read and understand the expectations for this course.

Course Title: Anatomy and Physiology

[A&P Syllabus Form](#)