



ANATOMY, PHYSIOLOGY & VISUAL ART Sample Course Overview

THE POWER OF VISUAL ARTS THROUGH THE **SCALPEL BRUSH METHOD** **OF INSTRUCTION**

The learning environment is re-shaped and empowered in ways you've not seen before. The Scalpel Brush Method develops critical thinking while enhancing communication and visual literacy skills within the student. You'll quickly find that your learners are not considering the educational process mere rote-memory drudgery; it's now a topic of discussion and enjoyment. Using the Scalpel Brush Method enables educators to magnify learner-centered discussions of visual art, so you will soon see a classroom that is more open to discussion. The Scalpel Brush method takes your students to a higher level as it engages them in a rigorous process of examination and meaning-making through visual art. For many, this is a level that is higher than they've ever achieved ... or imagined themselves achieving.

It's a new horizon in learning.

Course Description

Anatomy, Physiology and Visual Art is a course in which students will examine human anatomy and physical functions while applying various media, techniques, and processes in the areas of art production. They will analyze descriptive results of abnormal physiology and evaluate clinical consequences. The ability to analyze artworks will be embedded in the course through instruction of how concepts, enduring themes and societal issues relate to the visual arts.

Course Outcomes

Students will master the Tennessee State Standards by demonstration of the passing the End of Course Exams in both content areas. Below you will find the Tennessee State Performance Indicators for Anatomy and Physiology (listed in blue) as well as the integration of the Tennessee State Performance Indicators for Visual Art for grades 9–12 (listed in red). A sample assignment is also provided per State Standard.

1.0 The student will explore the organizational structure of the body from the molecular to the organism level.

1.0 Students will understand and apply media, techniques and processes.

2.0 Students will use knowledge of both structures and functions.

3.0 Students will choose and evaluate a range of subject matter, symbols and ideas.

4.0 Students will understand the visual arts in relation to history and cultures.

5.0 Students will reflect upon and assess the characteristics and merits of their work and the work of others.

6.0 Students will make connections between visual arts and other disciplines.

Sample Assignment

Using historical artistic representations the students will illustrate the cavities within the body and the organs that are located within them. Throughout the unit students will use representative symbols with corresponding medical terminology to label all components of the body cavities and their organs.

2.0 The student will explore the integumentary, skeletal, muscular systems and relate the structures to the various parts to the function they serve.

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Sample Assignment

Students will be asked to utilize various media, techniques and processes to create a visual representation of the skeletal system. As the unit progresses students will incorporate symbols (with labels) to demonstrate knowledge of each bone. Upon completion of the unit students will be asked to peer review each others work based upon a rubric as well compose an essay to describe the various functions of the skeletal system.

3.0 The student will investigate, compare and contrast methods of body control by the nervous and endocrine systems.

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Students will use knowledge of both structures and functions.

Students will choose and evaluate a range of subject matter, symbols and ideas.

Students will understand the visual arts in relation to history and cultures.

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Sample Assignment

Students will illustrate the spinal cord, neurons, neuroglia and the neuromuscular junction utilizing various types of media, techniques and processes. Throughout this area of study students will work in cooperative learning groups to prepare a presentation of the importance of the nervous system by preparing a presentation including the visual representation that they created and a brief review of the research they have collected.

4.0 The student will investigate the structure and function of the cardiovascular system with an emphasis on the blood, the heart and the lymphatic system and attention to the immune response.

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Students will use knowledge of both structures and functions.

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Sample Assignment

Students will use various media to create a three-dimensional representation of the heart illustrating how the blood flows through it. Using a rubric the students will also be required to conduct a peer review of each other's model.

5.0 The student will investigate the structures of the body associated with the absorption and excretion of materials, from the molecular, cellular, organ and systems levels of function.

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Students will use knowledge of both structures and functions.

Students will choose and evaluate a range of subject matter, symbols and ideas.

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Sample Assignment

The cooperative learning groups will select a digestive or urinary organ and create a three-dimensional model or illustration to present to the rest of the class including the functions, parts and interactions with organs.

6.0 The student will investigate the reproductive system and its association with the growth and development.

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Students will use knowledge of both structures and functions.

Students will choose and evaluate a range of subject matter, symbols and ideas.

Students will understand the visual arts in relation to history and cultures.

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Sample Assignment

Students will work in collaborative groups to create a visual timeline of the events during each gestational phase that represent historical time periods in art. The illustrations will be presented to the rest of the class by each group, which will be scored on a rubric.

Possible Implementation Strategies

Supplemental or Differentiation

At his or her own discretion a teacher may choose to assign content from either discipline in order to enhance the learning of advanced students, visual learners, or as choice for a project and/or extra credit.

Dual Enrollment

This approach requires that students be enrolled in Anatomy and Physiology while simultaneously enrolled in Visual Art. The two course instructors will collaborate to create lesson plans in order to support the learning of the content for both courses.

Co-Teaching

This approach utilizes two experts, one in each domain, in order to ensure that students master both content areas.