

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

- I. Generic Evaluation Criteria _____
- II. Instructional Content Analysis _____
- III. Specific Science Criteria _____

PUBLISHER: Elsevier

SUBJECT: Science

COURSE: Human Anatomy Physiology

TITLE: Anthony's Textbook of Anatomy & Physiology 17/e

COPYRIGHT DATE: 2004

SE ISBN: 0-323-03192-7

TE ISBN:

PART I - GENERIC EVALUATION CRITERIA GROUP V – 2006 TO 2012

HUMAN ANATOMY & PHYSIOLOGY LEVEL 11-12

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			<p>I. INTER-ETHNIC</p> <p>The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).</p>	
✓			<p>II. EQUAL OPPORTUNITY</p> <p>The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).</p>	

**PART II – INSTRUCTIONAL CONTENT ANALYSIS
HUMAN ANATOMY AND PHYSIOLOGY**

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
	<i>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N

The instructional materials program presents information and opportunities in a manner that enables the student to:

1.	<u>History and the Nature of Science</u>			
	a. formulate scientific explanations based on the student's observational and experimental evidence, accounting for variability in experimental results (HAP.1.1)	___	✓	___
	b. communicate that science has practical and theoretical limitations (HAP.1.2)	___	✓	___
	c. recognize that science is based on a set of observations in a testable framework that demonstrate basic laws that are consistent (HAP.1.3)	___	✓	___
	d. explore science as a blend of creativity, logic and mathematics (HAP.1.4)	___	✓	___
	e. trace the development of key historical concepts and principles describing their impact on modern thought and life by identifying the scientist's contributions (HAP.1.5)	___	✓	___
	f. integrate the history of science with cultural history to demonstrate that scientists work within their historical surroundings and are affected by them (HAP.1.6)	___	✓	___
2.	<u>Science as Inquiry Objectives</u>			
	a. develop the skills, attitudes and/or values of scientific inquiry (e.g., curiosity, logic, objectivity, openness, skepticism, appreciation, diligence, integrity, ethical practice, fairness, creativity) (HAP.2.1)	___	✓	___

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4.	<u>Scientific Design and Application Objectives</u>							
	a. summarize technological advances in the biological sciences (HAP.5.1)					✓		
	b. provide opportunities to analyze the interdependence of science and technology (HAP.5.2)					✓		
	c. relate how scientific skills and technological tools are used to design solutions that address personal and societal needs (HAP.5.3)					✓		
	d. describe the scientific concepts underlying technological innovations (HAP.5.4)					✓		
	e. integrate appropriate technology solutions to promote scientific inquiry (HAP.5.5)					✓		
5.	<u>Science in Personal and Social Perspectives</u>							
	a. describe the impact of cultural, technological and economic influences on the evolving nature of scientific thought and knowledge (HAP.6.1)					✓		
	b. describe occupational opportunities in science and technology (HAP.6.2)					✓		
	c. make decisions to resolve science-technology-society issues (HAP.6.3)					✓		

**HUMAN ANATOMY & PHYSIOLOGY LEVEL 11/12
PART III - SPECIFIC CRITERIA**

This advanced course is designed for those students wanting a deeper understanding of the structure and function of the human body. The body will be viewed as a whole using anatomical terminology necessary to describe location. Focus will be at both micro and macro levels reviewing cellular functions, biochemical, tissue interactions, organ systems and the interaction of those systems as it relates to the human organism. Systems covered include integumentary, skeletal, muscular, respiratory, circulatory, digestive, excretory, reproductive immunological, nervous and endocrine. This course will be appropriate for college bound students as well as those choosing a health services career cluster. Students will engage in active inquiries, investigation and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated into all activities.

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1.	<u>Frame of Reference for Anatomical Studies</u>							
	a. use directional terminology necessary for anatomical location such as proximal, dorsal, medial, lateral, visceral, superficial and deep (HAP.4.1)				✓			
	b. cite current literature and research related to human anatomy and physiology (HAP.4.2)					✓		
2.	<u>Chemical Level of Organization</u>							
	a. review foundational chemical concepts including atomic structure, bonding, chemical reactions, water and pH as they relate to living systems (HAP.4.3)				✓			
	b. explain the transfer of energy in chemical molecular processes in the human body (e.g., glycolysis, Krebs cycle, electron transport system) (HAP.4.4)					✓		

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3.	<u>Cellular /Tissue/System Levels of Organization</u>							
	a. describe the role of DNA in transcription and relate it to types of RNA and protein synthesis (HAP.4.5)					✓		
	b. relate the structure, functions and interactions of eukaryotic cell organelles and their products (HAP.4.6)					✓		
	c. describe the organizational levels, interdependency and the interaction of cells, tissues, organs, organ systems (HAP.4.7)					✓		
	d. categorize, by structure and function, the various types of human tissue (HAP.4.8)					✓		
4.	<u>Systems Level of Organization</u>							
	a. relate the structure of the integumentary system to its function as a sensory organ, environmental barrier and temperature regulator (HAP.4.9)				✓			
	b. relate how bone tissue is important to the development of the human skeleton (HAP.4.10)					✓		
	c. identify the structure and function of the skeletal system, including bones, markings on bones and articulations (HAP.4.11)				✓			
	d. show the mechanism of muscle contraction at micro and macro levels (HAP.4.12)				✓			
	e. describe the relationship between the skeletal, neural and muscular systems (HAP.4.13)					✓		
	f. identify muscle groups and types of muscles, including locations, origins, insertions (HAP.4.14)				✓			

