

HEALTH SCIENCE COURSE SYLLABUS

Fayette County BOE

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Course Title: Foundations of Health Science

Course Description: Foundations of Health Science is a required one-credit course that introduces students to a wide range of health careers. Integrated academics combined with health care knowledge and skills provide the framework for a strong health care delivery system in the twenty-first century. This course is the prerequisite for all the health science courses. It is recommended for students who want to prepare for further study in an array of health-related fields at the postsecondary level.

Prerequisites: None.

Instructional Plan: The Health Science philosophy is to provide an environment for developing proper skills, knowledge, safety habits, work ethics and pride in achievements. Students will be expected to meet all of the course goals and to demonstrate their understanding of the underlying concepts. The instruction will be lecture, videos, computers, demonstration, question and answer, laboratory, guest speakers and hands on application. The course requires students to use academic skills, such as Mathematics, Science, and Language Arts. Students will be expected to take part in discussions, work in groups, work individually, and complete homework assignments and complete assignments on time. Students will get a professionalism grade. This will be based on behavior, participation, and other employability skills.

Course Goals:

Students will learn how to:

Follow safety procedures	Demonstrate quality behavior
Perform quality work	Demonstrate knowledge of Health Science standards
Develop skills needed to be a contributing and productive member of society	

Essential Question(s): How will integrating and incorporating medical terminology into instruction regarding human body structures and functions and the disease process assist a health care worker succeed in the 21st century?

Course Outline:

Orientation/ Safety	Legal and Ethical Implications
Employability Skills	Health and Wellness
Career Opportunities	Technical Skills
Medical Terminology	Safety
Anatomy Overview	Financial Literacy
Communication Skills	Review and Tests

Culminating Product: Resume, Mock Interview, Career Project, Job Applications

Assessment Procedures: Student assessment will be based on attendance and participation in class, daily work, performance tests when applicable, and course projects. If necessary, students will be provided remediation for course standards. Students will complete all course requirements at minimum accuracy to pass the course.

Grading Scale will be on a point system.

Grading Scale:	A	90-100
	B	80-89
	C	70-79
	D	60-69
	F	Below 60

CTSO: HOSA-Future Health Professionals*

*All students are encouraged to join HOSA. Membership is optional, not required.

Career and technical student organizations are integral, co-curricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Content Standards for Numeracy:

12. Solve simple equations involving exponential, radical, logarithmic, and trigonometric functions using inverse functions.

22. Use the mathematical modeling cycle to solve real-world problems involving polynomial, trigonometric (sine and cosine), logarithmic, radical, and general piecewise functions, from the simplification of the problem through the solving of the simplified problem, the interpretation of its solution, and the checking of the solution's feasibility.

24. Design and carry out an experiment or survey to answer a question of interest, and write an informal persuasive argument based on the results

Embedded Numeracy Anchor Assignment: I & O Lab - Calculate input and output for a patient and determine if they are within normal limits using the metric system. Students must be able to convert standard measurement to the metric system and keep an accurate record of these measurements.

Content Standards for Literacy:

4) Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). [RL.9-10.4]

11) Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. [RI.9-10.2]

10) Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. [RI.11-12.1]

16) Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem. [RI.11-12.7]

38) Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *Grade 12 reading and content*, choosing flexibly from a range of strategies. [L.11-12.4]

Embedded Literacy Anchor Assignment: Research normal lab values for a urinalysis and electrolytes. Research normal ranges of input and output for the average adult and the importance of these values. Write a report discussing the findings.

Content Standards for Science:

9. Analyze and interpret data to compare the strength of intermolecular forces and how these forces affect physical properties and changes.

Objective HAP.7.1: Define cardiovascular system, myocardial infarction, mitral valve prolapse, varicose veins, arteriosclerosis, anemia, and high blood pressure.

Objective

HAP.9.1: Define organs, respiratory system

Embedded Science Anchor Assignment: Research how dehydration and overhydration affect the body, specifically the cardiovascular and respiratory systems. Pay close attention to lab values of electrolytes and reading a urinalysis. How to detect fluid overload, UTI, etc. with these laboratory tests. Calculate daily totals for input/output and determine if the patient is within normal limits. Accurately, fill out the graphic/flow chart provided in the simulated work environment. Evaluate a urinalysis report.

Available Student Industry Credentials/Career Readiness Indicators (CRIs):

Heart Saver Cardiopulmonary Resuscitation (CPR) certification and/or BLS

Supplies needed: Three ring 1” notebook, loose-leaf paper, black pen, and pencil

* The syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions, or substitutions.