

Health Science Careers II

Rationale Statement:

This course is designed to empower high school students to take charge of and set a course for their future. It will also prepare them to graduate with marketable skills and real-world work connection. Careers in the healthcare industry are robust and growing nationwide; however, it is actually experiencing a shortage of workers. The Department of Labor predicts that 8 of the 20 fastest growing occupations are in healthcare service. The need of healthcare professionals in the US is expected to increase by 27 percent by the year 2014. The course allows students to recognize their unique abilities relating to healthcare careers and assists them to find a pathway to success. This class will give students the opportunity to explore health science careers and evaluate personal career aspirations. They will discover and develop foundation skills that are essential to all health care workers.

Suggested Grade Level: 10-12

Topics covered:

- Safety practices
- Measuring vital signs
- First aid skills
- Medical Mathematics

| Indicator # 1: Apply safety practices in the healthcare environment. | |
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| Bloom's Taxonomy Level | Standard and Examples. |
| Understanding | <p>HC2 1.1 Explain principles of infection control.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Identify classes of pathogenic microorganisms • List the six components of the chain of infection • Report on a bioterrorism threat • Explain how an epidemic spreads |
| Understanding | <p>HC2 1.2 Identify common safety hazards by use of MSDS, signs and symbols and use of hazardous materials.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Explain how to use information from MSDS to handle a chemical spill • Explain safety signs using a poster you would find in a healthcare facility • Compare safety precautions by reading chemical labels • Identify the use, contents and storage of hazardous materials that may be present in the healthcare environment |

| Indicator # 2: Perform technical skills related to healthcare industry standards. | |
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| Bloom's Taxonomy Level | Standard and Examples. |
| Applying | <p>HC2 2.1 Apply procedures for measuring and recording vital signs.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Demonstrate measuring body temperature with different thermometers • Demonstrate measuring pulse in more than one site • Demonstrate measuring respirations and peak flow rate • Demonstrate measuring blood pressure with various equipment |
| Applying | <p>HC2 2.2 Apply first aid techniques.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Demonstrate checking consciousness of patient / manikin • Demonstrate use of CPR (cardiopulmonary resuscitation) and AED (automated external defibrillator) • Recognize the nature of the patient's injury and what action should be taken • Differentiate between an emergency and non emergency situation • React to scenarios with the check, call, care principle |

| Indicator #3: Utilize medical mathematics skills needed in healthcare work. | |
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| Bloom's Taxonomy Level | Standard and Examples. |
| Applying | <p>HC2 3.1 Apply mathematical computations related to healthcare procedures.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Convert household measurements to their equivalent metric measurement. • Measure liquids with a syringe, medicine cup, graduate • Calculate medication dosages • Read and interpret medication labels • Record time using a 24 hour clock |
| Analyzing | <p>HC2 3.2 Analyze diagrams, charts, graphs, and tables to interpret healthcare data.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Graph vital sign readings for a period of time. • Recognize normal ranges for vital sign measurements • Differentiate between normal reading and abnormal reading • Determine if the abnormal number is an emergency situation |