

**Jefferson County High School
Course Syllabus**

A. Course (*Health Science*)

B. Department (*Career Technical Education/Health Science and Technology*)

C. Course Description (*Health Science Education is an introductory course designed to prepare students to pursue careers in the fields of biotechnology research, therapeutics, health informatics, diagnostics, and support services. Upon completion of this course, a student proficient in Health Science Education will be able to identify careers in these fields, compare and contrast the features of healthcare systems, explain the legal and ethical ramifications of the healthcare setting, and begin to perform foundational healthcare skills. This course is a strong foundation and pre-requisite for all of the Health Science programs of study. Membership in HOSA is recommended.*)

D. Grade Term (*Semester; Fall 2016/Spring 2017*)

E. Grading Scale

<u>Range</u>	<u>Honors/ Regular</u>	<u>College-Level</u>	<u>A.P.</u>
93-100 A	4.0	4.5	5.0
85-92 B	3.0	3.5	4.0
75-84 C	2.0	2.5	3.0
70-74 D	1.0	1.5	2.0

F. Term Dates

- a. 1st 9 Weeks August 5, 2016 – October 7, 2016
- b. 2nd 9 Weeks October 8, 2016 – December 16, 2016
- c. 3rd 9 Weeks January 5, 2017 – March 15, 2017
- d. 4th 9 Weeks March 16, 2017 – May 25, 2017

G. Textbook(s) (*Health Science Fundamentals 1e revised ISBN: 0558823866*)

H. Other Required Reading

- a. *Diversified Health Occupations 6th Edition ISBN: 1401814565*
- b. *Insert Others If Applicable*

I. Other Resources

- a. Odysseyware
- b. *Quizlet*

J. Major Assignments

- a. *Career Presentation*
- b. *Safety Test (required)*
- c. *Health Insurance Activity*
- d. *Health Care Ethics and Legalities Essay*
- e. *Perform learned basic skills*
- f. *Anatomy Exam and Presentation*

K. Procedures for Parental Access to Instructional Materials

- a. Aspen Parent Portal
- b. Instructor's Website
- c. Email Instructor
- d. Parent Teacher Conference
 - a. There are two designated conference dates during the school year. Parents who would like to request additional meetings may make appointments for conferences with the teachers (during their planning periods), counselors, or a principal by telephoning the school office.

L. Field Trips

- a. Any schedule fieldtrip will have a definite educational purpose and will reflect careful planning. Signed permission forms will be obtained when an off campus trip is planned.
- b. **No field trips currently planned or approved for this course.**

M. Standards & Objectives

a. I Can Statement Scope & Sequence



Big Ideas/Key Concepts:

Students will analyze existing and potential hazard to clients, co-workers, and self to prevent injury or illness through safe work and infection control practices. All students must take the Health Science Safety Assessment and score 100% within the 1st 2 weeks of class to continue in the class. Failure to score 100% on safety assessment will result in removal from the class. Students will study and investigate the history of healthcare, including healthcare systems, facilities, and insurance, as well as compare and contrast healthcare careers.

Standards	Student Friendly “I Can” Statements
<p><u>Safety/OSHA/Infection Control</u></p> <p>13) Define chain of infection and provide strategies of how to break each part of the chain to prevent infection. Conduct a short research project on the effects of practices of sanitation and disinfection on health and wellness, examining the implications for public health. Synthesize findings in a written, oral, or digital presentation, citing evidence from the investigation. (TN CCSS Reading 1; TN CCSS Writing 6,7)</p> <p>14) Understand the principles of and successfully perform the following skills to prevent or curtail the spread of pathogenic and non-pathogenic organisms:</p> <p>a. Hand washing b. Gloving (TN CCSS Reading 3)</p> <p><u>History of Health Care</u></p> <p>4) Identify the types and defining features of healthcare systems in the United States. Compare and contrast these systems with those of other countries that have a high efficiency score in health care as rated by agencies such as the World Health Organization. Create a report and/or presentation on these comparisons. (TN CCSS Reading 1, 5; TN CCSS Writing 7, 8 ,9)</p>	<ul style="list-style-type: none"> • I can define the chain of infection and break apart the chain to prevent infection. • I can provide strategies to prevent the spread of infection. • I can conduct research on the help practices of sanitation and disinfection to promote health and wellness. • I can examine the implications of public health. • I can synthesize findings of infection control project into a written, oral or digital presentation and cite evidence as such. • I can demonstrate understanding of the principles of handwashing skill. • I can demonstrate understanding of use and removal of gloving skills. • I can identify the types of different healthcare systems in the United States and compare and contrast them with those of other countries. • I can compare and contrast the influences of different cultures on medicine. • I can create a report and present the findings of this comparison.

Big Ideas/Key Concepts:

Students will analyze the principles of basic anatomy and body organization. Students will apply these principles in assessing the health of individuals. Students will apply knowledge and skills to measure vital signs. Students will summarize the traits such as legal and ethical responsibilities, and cultural diversity awareness required of healthcare professionals in the twenty-first century.

Standards	Student Friendly “I Can” Statements
<p>Legal and Ethical Issues</p> <p>3) Drawing evidence from occupational profiles, industry journals, and textbooks, summarize the professional traits (such as leadership, ethical responsibility, and time management) required of healthcare professionals in the twenty-first century. (TN CCSS Reading 1; TN CCSS Writing 9)</p> <p>Vital Signs</p> <p>19) Understand principles of and successfully perform skills related to Medical Assisting Skills, incorporating rubrics from textbooks or clinical standards of practice for the following:</p> <p>a. Temperature, pulse, respiration and blood pressure assessment</p>	<ul style="list-style-type: none">• I can compare and contrast barriers in communication.• I can use email and social networking site appropriately.• I can compare the qualities of a health care professional to maintaining legal and ethical standards.• I can analyze consent forms, facility policies and procedure and patient confidentiality. <ul style="list-style-type: none">• I can use basic terminology used in vital signs.• I can measure my patients pulse, respiratory rate, temperature, and blood pressure correctly.• I can compare and contrast vital signs as they relate to the well-being of the patient.• I can convert mathematical measurements.• I can recognize the difference in vital signs based upon the age of the patient.• I can record my patient’s vital signs correctly.

Big Ideas/Key Concepts:

Students will analyze, compare and contrast the various human growth and development stages; study dental assisting and mouth care; perform medical assisting techniques such as turning and positioning, weighing and measuring patients; use physical therapy techniques in ambulating patients with crutches, wheelchairs, and walkers and other rehabilitative techniques; and study and analyze nutritional diets and health and wellness topics such as smoking cessation, weight loss, healthy eating, exercise, etc.

Standards	Student Friendly "I Can" Statements
<p><u>Human Growth & Development</u></p> <p>9) Describe how Maslow's Hierarchy of Needs can affect the physical, social, psychological, and behavioral status of a person. Use technology to produce a visual or digital chart or table to explain the information obtained from published or digital text. (TN CCSS Reading 1; TN CCSS Writing 6, 9)</p> <p>10) Generate an informational brochure that explains to community members the biophysical, mental/cognitive, social, and emotional development of patients at various stages of the life cycle: infancy, toddler, school age, adolescence, and adulthood (young, middle, and older). Cite textual evidence to support explanations. (TN CCSS Reading 1; TN CCSS Writing 9)</p> <p><u>Dental Assisting</u></p> <p>17) Understand principles of and successfully perform skills related to Dental Assisting, incorporating rubrics from textbooks or clinical</p>	<ul style="list-style-type: none">• I can demonstrate the different levels of Maslows Hierarchy of Needs and differentiate between the various levels.• I can compare and contrast the various developmental stages of a patient from infancy to adulthood.

Big Ideas/Key Concepts:

Students will apply knowledge and skills to perform first aid assessments and care. Students will explore alternative medicine, learning general information and benefits to educated consumers. Students will be able to successfully perform skills related to Medical Laboratory Assisting, such as obtaining a culture specimen. Students will be able to successfully perform skills related to Athletic Training, such as basic stretching exercises and injured athlete assessment. Students will be able to successfully perform skills related to the Forensic Scientist including extraction of DNA.

Standards	Student Friendly "I Can" Statements
<p><u>First Aid</u></p> <p>16) Understand principles of and successfully perform skills related to Emergency Medicine, incorporating rubrics from the American Heart Association or American Red Cross for the following:</p> <ul style="list-style-type: none">a. Basic First Aid care of bleeding and woundsb. Basic First Aid care for burnsc. Basic First aid for bone and joint injuries <p>(TN CCSS Reading 3)</p> <p><u>Alternative Healthcare</u></p> <p>15) Review health topics surrounding complementary and alternative medicine such as acupuncture, biofeedback, and herbal treatments. Develop a public service announcement or academic poster presentation intended to inform consumers or health professionals about the specific topic. Include general information, purported benefits, uses in the United States, side effects and/or risks, relevant research, cost, and links to more information. Cite evidence from print and digital resources such as research journals, the National Institute of Health, the Mayo Clinic, and Medline Plus. (TN CCSS Reading 1, 9;</p>	<ul style="list-style-type: none">• I can use HOSA and AHA guidelines to treat emergency conditions such as bleeding, shock, poisoning, burns, heat, cold exposure, musculoskeletal injuries, and sudden illness. • I can review complementary and alternative health topics such as acupuncture, biofeedback, and herbal treatments.• I can develop a PSA or poster presentation re: complementary and alternative medicine to educate consumers.• I can discuss benefits and cost of various alternative medicines.