

**Florida Department of Education
Curriculum Framework**

Course Title: Exploration of Health Science Professions
Course Type: Orientation/Exploratory
Career Cluster: Health Science

Secondary – Middle School

Course Number	8400310
CIP Number	03179999EX
Grade Level	6-8
Standard Length	Semester
Teacher Certification	Refer to the <u>Course Structure</u> section.
CTSO	HOSA: Future Health Professionals
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml

Purpose

The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the Health Science career cluster. The content includes but is not limited to exploratory activities relating to all health occupational clusters. The course also includes an introduction to medical ethics, consumerism, and characteristics of health care workers, community health agencies and basic computer literacy.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

The purpose of this course is to give students initial exposure to the skills and attitudes associated with a broad range of occupations relating to careers in health, including job requirements and tasks performed, to assist students in making informed decisions regarding their future academic and occupational goals.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Course Structure

This program is a planned sequence of instruction consisting of 1 course.

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

Course Number	Course Title	Teacher Certification	Length
8400310	Exploration of Health Science Professions	ANY HEALTH OCCUP G *(See DOE approved list) FAM CON SC 1 HEALTH 6 Any Field When Certificate Reflects Bachelor's Degree or Higher	Semester

Standards

After successfully completing this program, the student will be able to perform the following:

- 01.0 Demonstrate a well-rounded understanding of healthcare professions.
- 02.0 Demonstrate an understanding of the importance of legal and ethical behavior related to health care.
- 03.0 Perform basic communication skills in the healthcare setting.
- 04.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker.
- 05.0 Apply scientific principles to the health care field.
- 06.0 Perform basic health care skills.
- 07.0 Demonstrate occupational safety skills related to the employer, employee and the patient in the healthcare setting.

**Florida Department of Education
Student Performance Standards**

Course Title: Exploration of Health Science Professions
Course Number: 8400310
Course Length: Semester

CTE Standards and Benchmarks	
01.0	Demonstrate a well-rounded understanding of healthcare professions. – The student will be able to:
01.01	Explore the major scientific advancements that have contributed to the evolution of healthcare.
01.02	Research contributions made in the field of medical science and their impact on the health care field.
01.03	Identify types of education and training levels (OJT, HSTE, AA, BS/BA, MS, and Doctoral) as related to health careers.
01.04	Compare and contrast the health science career pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, Bio-technology Research and Development.
01.05	List the advantages and disadvantages of one occupation in each pathway including the following factors; job description, career pathway/area of interest, salary range, educational requirements and job outlook.
01.06	Research and describe a healthcare profession of interest identified through a career inventory assessment.
02.0	Demonstrate an understanding of the importance of legal and ethical behavior related to health care. – The student will be able to:
02.01	Identify responsibilities in maintaining ethical standards, confidentiality, and the patient's rights.
02.02	Identify and define terms related to the legal and ethical aspects of the health care industry. For example: malpractice, negligence, invasion of privacy, quackery, ethics and law, Patients' Bill of Rights, licensure.
03.0	Perform basic communication skills in the healthcare setting. – The student will be able to:
03.01	Demonstrate interpersonal communication skills such as active listening, verbal, non-verbal and written language in the health care setting.
03.02	Identify technology used for communication in healthcare professions and proper etiquette for its' use.
03.03	Demonstrate use of medical terminology and abbreviations associated with healthcare professions.
04.0	Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker. – The student will be able to:
04.01	Analyze case studies or current events where adverse consequences resulted from mathematical medical error.

CTE Standards and Benchmarks

04.02	Convert common weights, measure, and volumes to metric as applied in the health care setting.
04.03	Accurately identify and perform appropriate numeric procedures with problems found in numeric, symbolic, or word form as they relate to the occupations.
04.04	Accurately tell time using both standard and international/military time formats.
05.0	Apply scientific principles to the health care field. – The student will be able to:
05.01	Identify the overall organization of the human body.
05.02	Describe the basic structure and function of the body systems of the human body.
05.03	Describe how the systems of the human body work together to maintain homeostasis.
05.04	Describe mechanisms of disease transmission, the Chain of Infection, prevention and standard precautions.
06.0	Perform basic health care skills. – The student will be able to:
06.01	Measure and record (graph) height and weight.
06.02	Measure and record temperature, pulse, blood pressure and respiration while recognizing the normal ranges for each.
06.03	Demonstrate medical aseptic technique by hand washing, gloving and application of personal protective equipment (PPE).
06.04	Demonstrate basic first aid skills (i.e. bleeding, fractures, and musculoskeletal emergencies).
06.05	Demonstrate Cardiopulmonary Resuscitation (CPR) and care for a choking victim.
06.06	Demonstrate basic skills used within the healthcare professions may include the following:
06.06.01	Visualizing X-rays
06.06.02	Conduct vision testing (Snellen chart, peripheral vision, color blindness)
06.06.03	Conduct basic hearing test
06.06.04	Measure respiratory capacity/output
06.06.05	Range-of-Motion exercises
06.06.06	Conduct simulated ABO blood-typing
07.0	Demonstrate occupational safety skills related to the employer, employee, and the patient in the healthcare setting. – The student will be able to:
07.01	Recognize safety concerns related to the practice of health care.
07.02	Demonstrate safety habits that will prevent injury to health care workers, co-workers, and patients including proper use personal protective equipment (PPE) and infection control practices.
07.03	Identify poisons and hazardous materials to include the use and interpretation of a Safety Data Sheet (SDS) form.

CTE Standards and Benchmarks

07.04 Demonstrate an understanding for the importance of fire safety practices including prevention, evacuation plans (R.A.C.E.) and the use of a fire extinguisher (P.A.S.S.).

07.05 Explore basic information on the dangers of blood borne diseases in healthcare including but not limited to HIV/AIDS and Hepatitis B.

07.06 Perform proper body mechanics to prevent self and patient injuries.

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. To access an ELL supporting document which delineates performance definitions and descriptors, please click on the following link: <http://www.cpalms.org/uploads/docs/standards/eld/SI.pdf>. For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition at sala@fldoe.org.

Special Notes

The intended progression for the Health Science Middle School courses is Introduction to Health Science Career Pathways (8709350 & 8709360), Orientation to Health Science Professions (8400110) and Exploration of Health Science Professions (8400310 & 8400210). By offering the middle school courses in the intended progression, each course increases in complexity, rigor and skill level as appropriate.

Special projects that are related to each occupational cluster are provided, including role playing activities related to specific careers, visualizing x-rays and crutch-walking, operating the microscope, and specific lab procedures. Team teaching and integration of the curriculum with English, Math and Science is encouraged.

Guest speakers from industry and related field trips make important contributions to the effectiveness of this course.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the intercurricular career and technical student organization providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note: postsecondary curriculum and regulated secondary programs cannot be modified.

Additional Resources

For additional information regarding articulation agreements, Bright Futures Scholarships, Fine Arts/Practical Arts Credit and Equivalent Mathematics and Equally Rigorous Science Courses please refer to:

<http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml>