

**Florida Department of Education
Curriculum Framework**

Program Title: Allied Health Assisting
Program Type: Career Preparatory
Career Cluster: Health Science

Secondary – Career Preparatory	
Program Number	8417130
CIP Number	0317029903
Grade Level	9-12
Program Length	3 credits
Teacher Certification	Refer to the Program Structure section.
CTSO	HOSA
SOC Codes (all applicable)	31-9099 -- Healthcare Support Workers, All Other
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Health Science career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of several aspects of Health Science career cluster.

The content includes performing skills representative of one to three areas of allied health care in the laboratory and clinical settings. Major areas of allied health are defined as physical therapy, radiation, laboratory and respiratory medicine, and occupational therapy. **Such competencies must remain at the aide level and not go beyond the scope of practice of unlicensed assistive personnel. Invasive procedures that fall into the nursing scope of practice are not to be added.** Clinical experience is defined as activities performed in the clinical setting under the supervision of a health professional duly certified/licensed in the selected occupational fields. Simulated labs are not a substitute for clinical experience. School certificates for this module must be for “Allied Health Assistant”. Specific competencies may be listed on the back.

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

Program Structure

This program is a planned sequence of instruction totaling three credits. The two credit Health Science Core (Health Science Anatomy & Physiology 8417100 and Health Science Foundations 8417110) is required as a prerequisite for all programs and options. Secondary students completing the two required core courses will not have to repeat the core in postsecondary.

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

The following table illustrates the secondary program structure:

Course Number	Course Title	Teacher Certification	Length	SOC Code	Level	Graduation Requirement
8417100 OR	Health Science Anatomy & Physiology OR	ANY HEALTH OCCUP G (See DOE approved list) BIOLOGY 1	1 credit	31-9099	3	EQ
2000350 OR 2000360	Anatomy and Physiology OR Anatomy and Physiology Honors	SCIENCE @4 HEALTH 6 BIOLOGY 1 HEALTH ED @4				
8417110	Health Science Foundations	ANY HEALTH OCCUP G (See DOE approved list)	1 credit	31-9099	3	CT
8417131	Allied Health Assisting 3	ANY HEALTH OCCUP G (See DOE approved list)	1 credit	31-9099	2	CT

(Graduation Requirement Codes: CT= Career & Technical Education, EQ= Equally Rigorous Science, EC= Economics, MA= Mathematics, PL= Personal Financial Literacy)

Florida's Career Readiness Skills for CTE Programs

Employability Skills	
01.0	Apply academic skills to workplace scenarios.
01.01	Use reading skills.
01.02	Use writing skills.
01.03	Use mathematical strategies and procedures.
01.04	Use scientific principles and procedures.
02.0	Design a solution to an industry problem.
02.01	Use critical thinking.
02.02	Use creativity.
02.03	Make sound decisions.
02.04	Solve problems.
02.05	Reason.
02.06	Plan and organize.
03.0	Manage resources within an industry project
03.01	Manage time.
03.02	Manage money or resources.
03.03	Manage materials.
03.04	Manage personnel.
04.0	Oversee the subcomponents, operations and output of a technical or organizational system.
04.01	Manage systems.
04.02	Monitor systems.
04.03	Improve systems.
05.0	Use information for decision making.
05.01	Locate information.
05.02	Organize information.
05.03	Use information.

05.04	Analyze information.
05.05	Communicate information.
06.0	Apply relevant technology to workplace scenarios to aid productivity.
06.01	Use technology.
07.0	Interpret and express interpersonal communication.
07.01	Communicate verbally.
07.02	Listen actively.
07.03	Comprehend written material.
07.04	Convey information in writing.
07.05	Communicate nonverbally.
07.06	Interpret nonverbal communication.
08.0	Interact with others to accomplish workplace goals.
08.01	Collaborate with others in a team.
08.02	Respond to customer needs.
08.03	Exercise leadership.
08.04	Negotiate to resolve conflict.
08.05	Respect others.
09.0	Manage personal behavior to maximize productivity and professional growth.
09.01	Demonstrate responsibility and self-discipline.
09.02	Adapt and show flexibility.
09.03	Work independently.
09.04	Demonstrate a willingness to learn.
09.05	Demonstrate integrity.
09.06	Demonstrate professionalism.
09.07	Take initiative.
09.08	Display positive attitude.
09.09	Take responsibility for professional growth.

Career Exploration & Planning	
10.0	Explain career opportunities aligned with the regional economy and personal aspirations.
10.01	Describe regional occupations that are high-demand, high-growth, high-wage and/or high-skill.
10.02	Describe careers aligned with his or her interests, skills and values based on career assessment, experiential learning, career informational interviews, research and/or reflection.
11.0	Explain postsecondary pathways aligned with his or her career aspirations.
11.01	Compare and contrast postsecondary pathways, including education, employment, entrepreneurship and enlistment (the “Four Es”).
11.02	Compare and contrast regional postsecondary training provider options, including apprenticeships, technical colleges, state colleges, universities and industry-recognized certification providers.
11.03	Define postsecondary credentialing and stacking options, including industry-recognized certifications, apprenticeship certificates of completion, career certificates, licenses and associate or baccalaureate degrees.
11.04	Compare postsecondary training data for training programs of interest, such as total costs, average student loan debt, and median earnings and job placement rates after program completion.
12.0	Develop a personalized career and academic plan.
12.01	Prioritize an occupation, credential and postsecondary training provider for plan formation.
12.02	Self-assess progress toward meeting graduation requirements and skill-development goals.
12.03	Develop and complete a chronological checklist of steps and deadlines prior to postsecondary training or national service application that includes any required documentation to gather, writing prompts and examinations.
12.04	Identify a variety of financial aid opportunities, including scholarships, grants, savings, work, work-study programs, private loans and federal loans.
12.05	Develop a postsecondary training budget that is inclusive of living and school expenses.
Job Attainment	
13.0	Find, assess and apply to job opportunities.
13.01	Identify online job posts relevant to his or her career aspirations.
13.02	Compare and contrast the job posts’ required qualifications, job duties, compensation, benefits and employers.
13.03	Define what information, documentation and writing prompts are required for the positions.
14.0	Communicate personal competence, character and fit for a job opportunity.
14.01	Develop a resume.
14.02	Write a cover letter.
14.03	Curate a professional portfolio that includes work products.
14.04	Prepare for and experience a mock job interview.

15.0	Cultivate and leverage relationships to professionally advance.
15.01	Request a signed reference letter, letter of recommendation and/or an online skill/professionalism endorsement.
15.02	Develop a plan to cultivate a professional digital footprint.
15.03	Develop a networking plan for a specific industry of interest.

Standards

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

Health Science Core

- 01.0 Analyze and interpret an overview of the human body, including organization and chemical process.
- 02.0 Apply correct medical terminology relating to body structure and function within a real-world application.
- 03.0 Evaluate cells and tissues microscopically and macroscopically and relate their specialized functions.
- 04.0 Analyze the integumentary system in relation to health and disease.
- 05.0 Analyze the skeletal system in relation to health and disease.
- 06.0 Analyze the muscular system in relation to health and disease.
- 07.0 Analyze the nervous system in relation to health and disease.
- 08.0 Analyze the endocrine system in relation to health and disease.
- 09.0 Analyze the cardiovascular/circulatory system in relation to health and disease.
- 10.0 Analyze the lymphatic and immune systems in relation to health and disease.
- 11.0 Analyze the respiratory system in relation to health and disease.
- 12.0 Analyze the digestive system in relation to health and disease.
- 13.0 Analyze the urinary system in relation to health and disease.
- 14.0 Analyze both the male and female reproductive systems in relation to health and disease.
- 15.0 Identify and explain factors relating to genetics and disease.
- 16.0 Evaluate and apply the principles of disease transmission and control to real-world scenarios.
- 17.0 Demonstrate knowledge of the healthcare delivery system and health occupations.
- 18.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
- 19.0 Demonstrate legal and ethical responsibilities.
- 20.0 Demonstrate an understanding of and apply wellness and disease concepts.
- 21.0 Recognize and practice safety and security procedures.
- 22.0 Recognize and respond to emergency situations.
- 23.0 Recognize and practice infection control procedures.
- 24.0 Demonstrate an understanding of information technology applications in healthcare.
- 25.0 Demonstrate employability skills.
- 26.0 Demonstrate knowledge of blood borne diseases, including HIV/AIDS.
- 27.0 Apply basic math and science skills.

Allied Health Assisting 3

- 28.0 Perform skills representative of at least one (1) to three (3) major allied health areas in the school laboratory before beginning the observational phase.
- 29.0 Successfully complete an observational rotation in at least one (1) to three (3) major allied health areas.

**Florida Department of Education
Student Performance Standards**

Health Science Core

The first two courses in this program are referred to as the Health Science Core and consist of the courses Health Science Anatomy & Physiology (8417100) and Health Science Foundations (8417110). **To ensure consistency whenever these courses are offered, the standards and benchmarks for the health science core have been placed in a separate document. To access this document, visit this link:**
<https://www.fldoe.org/file/20894/health-sci-core-secondary-2627.rtf>

The two-credit core is required as a prerequisite for all secondary programs except for Practical Nursing and Pharmacy Technician. Secondary students completing the two required courses will not have to repeat the core in postsecondary. When the recommended sequence is followed, the structure allows students to complete at specified courses for employment or remain for advanced training or cross-training.

Course Title: Health Science Anatomy & Physiology
Course Number: 8417100
Course Credit: 1

Course Description:

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental quality, and safety procedures will be an integral part of this course. Students will interact with materials and primary sources of data or with secondary sources of data to observe and understand the natural world. Students will develop an understanding of measurement error, and develop the skills to aggregate, interpret, and present the data and resulting conclusions. Equipment and supplies will be provided to enhance these hands-on experiences for students. A minimum of 20% of classroom time will be dedicated to laboratory experiences.

This course is part of the secondary Health Core consisting of an overview of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. Medical terminology is an integral part of the course.

The course *Anatomy and Physiology (2000350)* or *Anatomy and Physiology Honors (2000360)* may be substituted for the course Health Science Anatomy & Physiology (8417100) and their standards can be found at www.cpalms.org.

The course Health Science Anatomy & Physiology (8417100) is designated as an equally rigorous (EQ) science credit.

Course Title: Health Science Foundations
Course Number: 8417110
Course Credit: 1

Course Description:

This course is part of the Secondary Health Core designed to provide the student with an in depth knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem solving skills. Students may shadow professionals throughout the course.

**Florida Department of Education
Student Performance Standards**

Course Title: Allied Health Assisting 3
Course Number: 8417131
Course Credit: 1

Course Description:

In this course, students will perform skills representative of one to three areas of allied health care in the laboratory and clinical settings.

CTE Standards and Benchmarks	
28.0	Perform skills representative of 1-3 major allied health areas in the school laboratory before beginning the observational phase. The student will be able to:
28.01	If clinical laboratory aide type skills is one of the selected allied health areas to be taught, only procedures that are exempt from clinical laboratory personnel licensure requirements will be presented and students will:
	• Perform waived testing on blood and urine.
	• Describe the process for preparing a blood slides for differential blood count.
	• Report urine specific gravity, color and characteristics.
	• Perform centrifuge operation and maintenance. (OPTIONAL)
	• Identify and explain the use of the common instruments/equipment found in the clinical laboratory.
	• Explain specimen differentiation.
	• Perform communication skills specifically related to laboratory science.
	• Discuss the process of performing various venipunctures.
	• Name and discuss the specialty areas within laboratory (hematology, clinical chemistry, microbiology, etc.).
	• Explain the criteria set forth in CLIA to classify laboratory testing as waived, moderate complexity or high complexity.
	• Explain the levels and qualifications for testing personnel as set forth in CLIA (complexity based) and as established by state law (licensure categories).
28.02	If physical restorative aide type skills is one of the selected allied health areas to be taught, students will:
	• Describe the functions of bones and muscles as related to the practice of physical therapy.

CTE Standards and Benchmarks

- Define disability and identify types of disabilities.
 - Name and discuss the pathways of physical therapy practice.
 - Describe equipment used in physical therapy.
 - Perform safe body mechanics and transfer
 - Demonstrate an understanding of the use of modalities (i.e., Ultrasound, heat and cold therapeutic massage, E-STEM, wound care, elastic stockings, etc.).
 - Describe the process of hydrotherapy.
 - Perform communication skills specifically related to physical therapy aide.
 - Identify, describe, and demonstrate the use of devices such as crutches, walkers, canes, and wheelchairs, etc.
 - Demonstrate techniques used in active and passive range of motion exercises.
 - Instruct patients in bed/wheelchair mobility.
 - Describe the relationship between long-term and short-term goals.
- 28.03 If occupational restorative aide type skills is one of the selected allied health areas to be taught, students will:
- Assist clients to eat using prompting.
 - Identify augmented communication devices and purposes of each.
 - Describe equipment used in occupational therapy.
 - Describe the splint making process.
 - Perform feeding and dressing skills using adaptive equipment.
 - Perform feeding and dressing skills using one hand.
 - Perform communication skills specifically related to occupational therapy.
 - Perform and instruct range of motion exercises.
 - Name and discuss the pathways of occupational therapy practice.
 - Educate the client in activities of daily living skills such as clothing care skills, food preparation, and money management, etc.

CTE Standards and Benchmarks

28.04 If respiratory restorative aide type skills is one of the selected allied health areas to be taught, students will:

- Name and discuss the pathways of respiratory care practice.
- Describe common respiratory diseases (asthma, emphysema, chronic bronchitis, and atelectasis, etc.) and common medications used to treat respiratory diseases.
- Recognize normal breath sounds when auscultating the chest with a stethoscope.
- Describe the use of oxygen flow regulating equipment.
- Demonstrate and discuss the use of incentive spirometers.
- Differentiate between various oxygen delivery devices (nasal cannulas, simple and re-breathing masks, oxy-hoods, and enclosures, etc.).
- Check emergency equipment assigned to respiratory care.
- Discuss the use of postural drainage and percussion.
- Discuss and practice the use of the pulse oximeter.
- Describe the equipment and use of humidity/aerosol.

28.05 If medical administrative assisting type skills is one of the selected allied health areas to be taught, students will:

- Demonstrate an understanding of basic medical terminology e.g., prefixes, suffixes, abbreviations, and root words related to major body systems.
- Demonstrate an understanding of straight numerical, alphabetical and terminal digit filing.
- Demonstrate computer literacy, keyboarding and retrieval skills.
- List procedures for scheduling and referring patients, handling walk-in emergency patients, and telephone etiquette.
- Understand what is required to create and submit a medical bill
- Define a release of medical information, explanation of benefit, assignment of benefit, and electronic remittance advice.
- Develop an understanding of healthcare coverage and be able to interpret the information contained on the patient's insurance card.
- Discuss the various types of medical records such as electronic health record (EHR), digital records, and paper records with regard to content and security.
- Understand the financial terms and procedures involved in operating a medical office practice including, income, expense, accounts receivable, accounts payable, cash and accrual accounting, write-off adjustments.

CTE Standards and Benchmarks

28.06 If radiologic aide type skills is one of the selected allied health areas to be taught, students will:

- Compare and contrast the development of x-rays through digital media or through film.
- Identify the function of a cassette, film, and screen.
- Describe how radiation produces an image on film and through digital technology.
- Identify the process by which x-ray film is developed.
- Identify anatomical position and terminology medial, lateral, superior, inferior, anterior/ventral, and posterior/dorsal).
- Identify patient properly to include doing the correct procedure on the correct patient in the right location (check identification band, etc.).
- Explain appropriate exam(s) to the patient.
- Perform safe body mechanics and transferring skills of patient onto x-ray table.
- Position patient for exam(s) (chest, KUB, hand and foot, etc.).
- Position x-ray tube to simulate exposure for exam(s) (chest, KUB, hand, and foot, etc.).
- Position patient in supine, prone, lateral, oblique, AP, PA, etc. of appropriate part.

28.07 If geriatric aide type skills are to be taught, students will:

- Recognize types of long term care facilities and levels of care.
- Be familiar with legislation affecting long-term care.
- Discuss physical and emotional effects of aging and appropriate ways of dealing with them.
- Recognize the stages of dementia and the care of residents in each stage.
- Discuss reality orientation, reminiscing, and validation therapy.
- Describe ways to meet the nutritional needs through diet, dietary supplements, and mechanisms to provide supplements.
- Provide for the safety of the elderly and chronically ill patient, including prevention of falls, prevention of infections, provision of a safe environment and prompt attendance to patients' needs, etc.
- Check integrity of patient's skin condition and take appropriate actions when needed.
- Recognize common chronic illnesses and the special care required.

CTE Standards and Benchmarks

- Provide appropriate end of life care.

- Describe common medications taken by the elderly and chronically ill, their effects, and side effects.

28.08 If electrocardiograph technician skills are to be taught, students will:

- Describe the cardiovascular system.
 - Correlate the anatomy of the heart to the placement of leads for an EKG including special needs populations.
 - Correlate the electrical conduction system of the heart to the rhythms.
 - Compare and contrast polarization, depolarization and repolarization as it applies to patient care scenarios.
 - Describe the usual pattern of electrical flow through the conduction system including the five major areas and physical layout.
 - Give the inherent rates for the SA node, the AV junction, and the ventricles.
- Demonstrate an understanding of the role and responsibilities of the EKG tech.
 - Recognize and practice legal and ethical responsibilities as they relate to an EKG tech.
 - Prepare and maintain all EKG equipment
 - Identify patient and verify the requisition order.
 - State precautions required when performing diagnostic procedures.
 - Recognize a cardiac emergency.
- Demonstrate knowledge of, apply and use medical instrumentation modalities.
 - Calculate a patient's heart rate from the EKG tracing (for example 6-second method).
 - Perform a 12 lead EKG.

- Recognize normal and abnormal monitoring.

28.09 If biomedical research type skills is one of the selected allied health areas to be taught, students will:

- Comprehend technical vocabulary.
- Document lab results accurately.

CTE Standards and Benchmarks

	Recognize hazardous lab conditions.
	Maintain safe work environment, including but not limited to correct handling, storing, and disposing of hazardous materials, and use of personal protective equipment, etc.
	Research regulatory bodies (OSHA, NIH, NR, DOT, EPA, CDC, NRC, CLIA, DEA and FDA, etc.).
	Discuss testing methods and inspection procedures in relation to quality control.
	Discuss environmental conditions of research facility (growth chamber, greenhouse, seed storage room, animal housing or manufacturing site).
	Discuss the proper utilization of test plants and animals.
	Prepare solutions and reagents for laboratory use.
	Operate laboratory equipment.
	Identify common microorganisms.
	Explain how to culture and perform bioassays.
	Discuss genetic engineering skills.
	Utilize problem-solving skills.
	Practice asepsis.
	Discuss sterilization techniques, including proper packaging of sterile goods.
29.0	Successfully complete an observational rotation in at least one (1) to Three (3) major allied health areas. The student will be able to:
29.01	Observe skills in the clinical setting as outlined in the above standard.
29.02	Complete One (1) - three (3) observational rotations under the supervision of a duly licensed/certified allied health care professional.
29.03	Exhibit behavior consistent with the professional ethics required of each of the allied health areas being studied.

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.

This program requires a clinical component of approximately 50% the length of the courses following the health science core. A portion of the clinical experience can be achieved through simulation when appropriate.

Clinical courses require contact hours in the clinical setting in order to complete the health science program. Hospitals, nursing homes, and other clinical facilities with clinical affiliation agreements limit the number of students that can rotate and/or be on site at one time. Most facilities, including hospitals and nursing homes, limit the number of students to 15. Due to these industry limitations, it is recommended that the student ratio be 15:1 (student/teacher) based on the clinical facilities that students attend to for clinical training.

Florida Standards for English Language Development (ELD)

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

For each skill set, the teacher certification used must also be able to teach programs that encompass the competencies being taught. The teacher certifications that teach the individual skill sets should be experienced and capable in the skills themselves in order to teach.

Following the completion of the Health Science Anatomy and Physiology and Health Science Foundations courses, the student is eligible to take the National Health Care Foundation Skill Standards Assessment with instructor approval and the completion of a portfolio.

This program meets the Department of Health's education requirements for HIV/AIDS, Domestic Violence and Prevention of Medical Errors. Although not a requirement for initial licensure, it is a requirement for renewal, therefore the instructor **may** provide a certificate for renewal purposes to the student verifying these requirements have been met.

If students in this program are seeking a licensure, certificate or registration through the Department of Health, please refer to 456.0635, F.S. for more information on disqualification for a license, certificate, or registration through the Department of Health.

Career and Technical Student Organization (CTSO)

CTSOs are co-curricular career and technical student organizations 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. Other CTSOs not listed in this curriculum framework or recognized by the Florida Department of Education are permissible provided they support student mastery over the standards and benchmarks of this curriculum framework.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the OJT framework apply.

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.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular course or a modified course. If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete a Career and Technical Education (CTE) course. The student should work on different competencies and new applications of competencies each year toward completion of the CTE course. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number for eligible students with disabilities.