# Florida Department of Education Curriculum Framework

Program Title: Dental Hygiene Career Cluster: Health Science

	AS
CIP Number	1351060200
Program Type	College Credit
Standard Length	88 credit hours
CTSO	HOSA: Future Health Professionals
SOC Codes (all applicable)	29-2021 Dental Hygienists
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 all aspects of Health Science career cluster.

This program is designed to prepare students for employment as dental hygienists SOC Code-29-2021 Dental Hygienist or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes but is not limited to patient assessment, dental hygiene instrumentation and direct patient care services (scaling/root planing/curettage/radiographs/oral hygiene-instruction/expanded functions), community dental health, dental office emergencies, infection control, special needs dental care, office management, employability skills, ethics and jurisprudence.

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 consisting of 88 credit hours.

## **Regulated Programs**

Students are prepared to take the Dental Hygiene National Board and state licensure examinations. Dental Hygiene Programs accredited by the American Dental Association Commission on Dental Accreditation are required to implement clinical experiences outlined in these program standards.

## **Standards**

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

- 01.0 Demonstrate knowledge of the dental health care delivery system and dental health occupations.
- 02.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
- 03.0 Describe the legal and ethical responsibilities of the dental health care provider.
- 04.0 Demonstrate an understanding of general anatomy and physiology and apply wellness and disease concepts.
- 05.0 Demonstrate the importance of health, safety, and environmental management systems in dental organizations and their importance to organizational performance and regulatory compliance.
- 06.0 Recognize and respond to emergency situations.
- 07.0 Use information technology tools.
- 08.0 Explain the importance of employability skills.
- 09.0 Demonstrate knowledge of infectious diseases.
- 10.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
- 11.0 Perform remediable tasks delegable to a dental hygienist as permitted by Florida Statutes/Law.
- 12.0 Perform dental office procedures.
- 13.0 Identify, describe, maintain and utilize dental instruments and equipment.
- 14.0 Identify and perform dental and radiographic procedures.
- 15.0 Identify properties and uses, and demonstrate manipulation of dental materials.
- 16.0 Identify, explain the formation and function of the head, neck, dental structures and tissues including pathological conditions of the human body in relation to the oral cavity.
- 17.0 Identify, explain principles of microbiology, disease transmission, disease prevention, and perform infection control procedures.
- 18.0 Explain usage, administration, indications, contraindications, adverse reactions and precautions of pharmaceutical and anesthetic agents used in the treatment of dental disease.
- 19.0 Describe principles and perform techniques of preventive dentistry.
- 20.0 Perform patient assessment.
- 21.0 Perform direct patient services and competently provide dental hygiene process of care for the child, adolescent, adult and geriatric patient as well as the special needs patient.
- 22.0 Implement and evaluate community health interventions and research activities.

# Florida Department of Education Student Performance Standards

Program Title: Dental Hygiene
CIP Number: 1351060200
Program Length: 88 credit hours

SOC Code(s): 29-2021

Refer to Rule 6A-14.030 (4) F.A.C., for the minimum amount of general education coursework required in the Associate of Science (AS) degree. At the completion of this program, the student will be able to:

Dental Hygiene Students completing the following intended outcomes (1-22) have met the requirements of the Dental Hygiene Program and qualify to submit an application for the Dental Hygiene National Board and state licensure examinations.

01.0	Demonstrate knowledge of the dental health care delivery system and dental health occupations. – The student will be able to:
	01.01 Identify the basic components of the dental health care delivery system including public, private, government and non-profit.
	01.02 Describe the various types of dental health care providers and the range of services available.
	01.03 Describe the composition and functions of a dental health care team.
	01.04 Identify the general roles and responsibilities of the individual members of the dental health care team.
	01.05 Identify the roles and responsibilities of the consumer within the dental healthcare system.
	01.06 Explain factors that influence the current delivery system of dental healthcare.
	01.07 Explain the impact of current and emerging issues including technology, epidemiology, bioethics and socioeconomics on the dental healthcare delivery system.
	01.08 Discuss the history of dentistry and dental hygiene.
	01.09 Demonstrate knowledge in communicating and collaborating with other members of the health care team to support comprehensive patient care.
02.0	Use oral and written communication skills in creating, expressing and interpreting information and ideas. – The student will be able to:
	02.01 Apply basic speaking and active listening skills including reflection, restatement, and clarification techniques.
	02.02 Develop basic observational skills and related documentation strategies in written and oral form.
	02.03 Identify characteristics of successful and unsuccessful communication including communication styles and barriers.

	2.04 Compose written communication using correct spelling, grammar, formatting and confidentiality.	
	2.05 Recognize components of medical and dental terminology and abbreviations.	
	2.06 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpers relationships.	sonal
	2.07 Recognize the importance of patient education regarding dental and health care.	
	2.08 Adapt communication skills to meet various levels of understanding and orientation of diversity including but not limited to sexual orientation, gender orientation, disability, age, culture, economics, ethnicity and religion.	)
	2.09 Identify psychological considerations influencing communication and behaviors.	
03.0	escribe the legal and ethical responsibilities of the dental health care provider The student will be able to:	
	3.01 Identify areas of Florida Statute 466 and Rule 64B5-16 FAC and Rule 64B5-25 FAC applicable to practice by dental heal providers.	th
	3.02 Explain practices that could result in malpractice, liability, negligence, abandonment, false imprisonment and fraud.	
	3.03 Demonstrate procedures for accurate documentation and record keeping.	
	3.04 Interpret healthcare facility policy and procedures.	
	3.05 Explain the patients' "Bill of Rights".	
	3.06 Identify and implement standards of the Health Insurance Portability and Accountability Act (HIPAA), including but not lim social media, and use of personal electronic devices in the workplace.	nited to
	3.07 Distinguish between express, implied and informed consent.	
	3.08 Explain the laws governing harassment, labor and employment.	
	3.09 Differentiate between legal and ethical issues in dentistry.	
	3.10 Describe the dental profession's Code of Ethics.	
	3.11 Identify and compare personal, professional and organizational ethics.	
	3.12 Recognize the limits of authority and responsibility of dental health care workers including legislated scope of practice.	
	3.13 Recognize and report illegal and/or unethical practices of dental health care workers.	
	3.14 Recognize signs of abuse and neglect.	
	3.15 Demonstrate an understanding of reporting requirements for all types of abuse.	
	3.16 Identify resources for victims of abuse.	

03.17 Define commonly used legal vocabulary relating to dentistry.
03.18 Describe ethical considerations/obligations in the dental team-patient relationship.
03.19 Explain risk management and root cause analysis.
03.20 Apply self-assessment skills to prepare for life-long learning.
03.21 Apply ethical principles, legal and regulatory concepts to resolve ethical dilemmas.
Demonstrate an understanding of general anatomy and physiology and apply wellness and disease concepts. – The student will be able to:
04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify common disorders related to each of the body systems.
04.03 Explain basic concepts of positive self-image, wellness, and stress.
04.04 Describe a wellness and stress control plan that can be used in personal and professional life.
Demonstrate the importance of health, safety, and environmental management systems in dental organizations and their importance to organizational performance and regulatory compliance. – The student will be able to:
05.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments, including the proper transport and transfer of patients.
05.02 Identify medical errors and describe methods to reduce and prevent errors in the dental healthcare setting.
05.03 Demonstrate an understanding of personal safety procedures based on Occupational Safety and Health Administration (OSHA) and Centers for Disease Control and Prevention (CDC) regulations (including standard precautions).
05.04 Recognize Safety Data Sheets (SDS) and Globally Harmonized System (GHS) labels and comply with safety signs, symbols and labels.
05.05 Describe workplace preparedness and procedures for fire safety, disaster, and evacuation.
05.06 Explain procedures to follow for responding to, reporting, and recording workplace incidents.
05.07 Demonstrate handwashing and the use of personal protective equipment used in dentistry.
Recognize and respond to emergency situations. – The student will be able to:
06.01 Take and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain certification in cardiopulmonary resuscitation (CPR), automated external defibrillator (AED), foreign body airway obstruction (FBAO), and first aid.

07.0	Use information technology tools. – The student will be able to:
	07.01 Define terms and demonstrate basic computer skills.
	07.02 Interpret and input information from electronic medical documents.
08.0	Explain the importance of employability skills. – The student will be able to:
	08.01 Identify personal traits or attitudes desirable in a member of the healthcare team.
	08.02 Exemplify basic professional standards of dental healthcare providers.
	08.03 Develop a professional resume and/or career portfolio.
	08.04 Conduct a job search and complete a job application form.
	08.05 Demonstrate effective job interview techniques.
	08.06 Examine levels of education, credentialing requirements including licensure and certification, employment opportunities, workplace environments, and career growth potential.
09.0	Demonstrate knowledge of infectious diseases. – The student will be able to:
	09.01 Recognize emerging diseases and disorders.
	09.02 Demonstrate knowledge of transmission and treatment of diseases caused by infectious agents or organisms.
	09.03 Identify "at risk" behaviors that promote the spread of infectious diseases and the public education necessary to combat the spread of these diseases.
	09.04 Identify community resources and services available to the individuals with infectious diseases.
	09.05 Apply infection control techniques designed to prevent the spread of infectious diseases in the care of all patients following Centers for Disease Control and Prevention (CDC) guidelines.
	09.06 Demonstrate knowledge of the legal aspects of treating patients with infectious diseases, including testing and proper documentation.
10.0	Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. – The students will be able to:
	10.01 Analyze attributes and of effective leadership.
	10.02 Recognize factors and situations that may lead to conflict.
	10.03 Demonstrate effective problem-solving techniques for managing team conflict.
11.0	Perform remediable tasks delegable to a dental hygienist as permitted by Florida Statutes/Law The student will be able to:
	11.01 Demonstrate remediable delegable tasks to lab and/or clinical competence.

12.0	Perform dental office procedures The student will be able to:
	12.01 Maintain appointment control with effective time management skills.
	12.02 Assess, create, modify, and maintain an active re-care system.
	12.03 Prepare and maintain accurate patient records.
	12.04 Demonstrate skills on office equipment to include computers and dental office management systems.
	12.05 Utilize correct dental codes and nomenclature for procedures.
13.0	Identify, describe, maintain and utilize dental instruments and equipment The student will be able to:
	13.01 Identify and demonstrate the operation of dental operatory and laboratory equipment.
	13.02 Maintain dental operatory equipment and instruments.
	13.03 Identify and demonstrate the use of dental hygiene instruments.
14.0	Identify and perform dental and radiographic procedures The student will be able to:
	14.01 Describe history, physics and biological effects of ionizing radiation.
	14.02 Identify parts of the radiographic imaging machine.
	14.03 Demonstrate radiologic health protection techniques.
	14.04 Perform radiographic procedures that include processing, utilization, and care of equipment.
	14.05 Place image receptors, expose dental images, and understand the relevance of exposure settings, times and patient record keeping.
	14.06 Identify radiographic anatomical landmarks.
	14.07 Mount radiographic surveys and/or save and store digital files.
15.0	Identify properties and uses, and demonstrate manipulation of dental materials The student will be able to:
	15.01 Identify properties and uses and demonstrate manipulation of gypsum.
	15.02 Identify properties and uses and manipulation of sealants and restorative materials.
	15.03 Identify properties and uses and demonstrate manipulation of dental cements.
	15.04 Identify properties and uses and demonstrate manipulation of impression materials.
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	15.05 Identify properties and uses and demonstrate manipulation of acrylics and/or thermoplastics.
	15.06 Identify and demonstrate dental laboratory procedures as outlined by remediable tasks delegable to the dental hygienist by Florida Statute/Law.
16.0	Identify, explain the formation and function of the head, neck, dental structures and tissues including pathological conditions of the human body in relation to the oral cavity The student will be able to:
	16.01 Identify structures and functions of head and neck anatomy including bones, muscles, sinuses, salivary glands, lymph nodes, nerves, and blood vessels.
	16.02 Identify embryonic development of the head, oral cavity, and teeth.
	16.03 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
	16.04 Describe and differentiate between normal and malocclusion.
	16.05 Identify the elements of the chemical basis of life, cellular metabolism and the structure of the major tissue types of the human body.
	16.06 Describe the metabolism of nutrient foods, vitamins and minerals by the human body and pathological conditions related to nutrient deficiencies.
	16.07 Identify anatomical structures and physiological function of the principle systems of the human body including the skeletal, muscular, integumentary, circulatory, lymphatic, endocrine, digestive, reproductive, respiratory, urinary, and nervous systems.
	16.08 Recognize and describe oral pathological conditions related to the teeth and their supporting structures.
	16.09 Identify teeth and their landmarks, and the morphological characteristics of each individual tooth.
	16.10 Recognize and describe developmental anomalies related to the head and oral structures.
17.0	Identify, explain principles of microbiology, disease transmission, disease prevention, and perform infection control procedures The student will be able to:
	17.01 Differentiate between pathogenic and non-pathogenic microorganisms.
	17.02 Describe pathogens and modes of disease transmission.
	17.03 Differentiate between aseptic and non-aseptic environments.
	17.04 Perform aseptic handwashing technique.
	17.05 Describe, apply and differentiate between methods of cleaning, disinfection and sterilization of the dental environment.
	17.06 Recognize the need for and demonstrate the use of proper precautions for the prevention of disease transmission during all dental related procedures.
	17.07 Identify the role of prokaryotic cells, eukaryotic cells, viruses, and bacteria in infections and mechanisms of diseases.
	17.08 Identify the genetics of microbes including replication of DNA and protein synthesis, mutation and gene transfer.

18.0	Explain usage, administration, indications, contraindications, adverse reactions and precautions of pharmaceutical and anesthetic agents
	used in the treatment of dental disease The student will be able to:  18.01 Identify the agencies responsible for drug regulations.
	18.02 Document in a patients chart medication prescribed by the dentist.
	18.03 Identify medication actions, side effects, indications and contraindications; verify with Physician's Desk Reference or its equivalent.
	18.04 Describe the process of medication metabolism.
	18.05 Identify pharmaceuticals and medicaments used in dentistry.
	18.06 Recognize specific conditions in the oral cavity that may be caused by pharmaceutical agents.
	18.07 Identify properties of anesthetics.
	18.08 Identify the tissues innervated by each of the nerves associated with dental local and topical anesthesia.
	18.09 Describe properties and mode of action of an effective local and topical anesthetic.
	18.10 List systemic considerations in choosing a local and topical anesthetic.
	18.11 Describe and demonstrate methods of administering topical and local anesthetics.
	18.12 List potential local and systemic adverse reactions associated with local anesthetic administration.
	18.13 Prepare armamentarium for administering local anesthetics for recognized techniques.
	18.14 Document anesthetics administered and any adverse reactions in a patients chart.
	18.15 Describe the monitoring process and identify precautions in the use of nitrous oxide-oxygen inhalation analgesia.
19.0	Describe principles and perform techniques of preventive dentistry The student will be able to:
	19.01 Identify, communicate, and instruct patients on applicable methods of preventive dentistry that utilize: 19.01.01 risk assessment 19.01.02 evidence based learning 19.01.03 individualized preventive care plans 19.01.04 motivational interviewing/counseling 19.01.05 training regarding health status and rationale for preventive care plan.
	19.02 Identify properties and indications for use of anticariogenic treatments utilized in the community, home, and office.
	19.03 Identify and demonstrate proper auxiliary aides based on individual patient needs.
	19.04 Identify and describe deficiencies that manifest symptoms in the oral cavity and communicate applicable therapies.

	19.05 Present dietary recommendations to address specific dental needs during nutritional counseling.
20.0	Perform patient assessment The student will be able to:
	20.01 Take, record, and correlate medical/dental history with dental hygiene treatment plan and services to be performed.
	20.02 Take, record, and correlate vital sign observations with dental hygiene treatment plan and services to be performed.
	20.03 Assess vital signs in order to reduce incidence of patient complications and medical emergencies.
	20.04 Perform record and correlate extraoral and intraoral examination findings with dental hygienecare plan and patient services to be performed.
	20.05 Observe and record existing restorations as well as conditions and suspected pathologies of hard and soft tissues using the appropriate armamentarium.
	20.06 Perform a comprehensive periodontal examination which includes pocket depth, attachment level, recession, mobility, furcations, radiographic findings, and tissue health.
	20.07 Consult with dentist and physicians to verify dental and medical information to develop and implement dental hygiene care plan.
	20.08 Interpret and correlate dental radiographs and dental charting with dental hygiene treatment plan.
	20.09 Perform soft tissue reassessment and evaluate the effects of initial dental hygiene therapy and make appropriate therapy modifications or referrals.
	20.10 Identify oral manifestations that deviate from normal.
	20.11 Document the diagnosis made by dentist.
	20.12 Recognize and respond appropriately to contraindications for dental hygiene treatment found in medical and dental history.
	20.13 Identify and assess dental office emergencies and follow the appropriate protocol for treatment.
21.0	Perform direct patient services and competently provide dental hygiene process of care for the child, adolescent, adult and geriatric patient as well as the special needs patient The student will be able to:
	21.01 Demonstrate all delegable dental hygiene clinical services within the scope of practice as permitted by Florida statute/law
	21.02 Communicate to patients' appropriate post-operative instructions and correctly select all necessary self-care therapies intended to restore and maintain the patients' oral health.
	21.03 Provide and communicate recommendations for patient use of caries prevention agents.
	21.04 Provide a comprehensive collection of patient data to identify the physical and oral health status as well as risk factors that could affect patient care and healing.
	21.05 Provide analysis of assessment findings and use of critical thinking in order to address the patient's dental hygiene treatment needs.
	21.06 Establish a dental hygiene care plan that reflects the desired outcomes and treatment interventions to facilitate optimal oral health.
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	21.07 Present proposed treatment and procedures to the patient and obtain appropriate informed consent signatures prior to rendering patient care services.
	21.08 Provide patient-centered treatment and evidence-based care in a manner minimizing risk and optimizing oral and systemic health.
	21.09 Measure the extent to which desired outcomes identified in the dental hygiene care plan are achieved.
22.0	Implement and evaluate community health interventions and research activities The student will be able to:
	22.01 Demonstrate competence in assessment, planning, implementation, and evaluation of community health interventions.
	22.02 Formulate and analyze research methodologies for community health interventions.
	22.03 Perform a literature search and interpret research findings in scientific literature.
	22.04 Apply research findings to dental hygiene care delivery.
	22.05 Apply statistical analysis and evidence based research to health trends and community interventions.
	22.06 Collaborate and perform a needs assessment with community partners.
	22.07 Differentiate scientific value of literature found in both electronic and traditional mediums.

#### **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.

Equipment and supplies should be provided to enhance hands-on experiences for students. In depth clinical information and requirements can be found in the Commission on Dental Accreditation Dental Hygiene Standards.

## **Special Notes**

General education content must include oral and written communications, Psychology and Sociology.

Biomedical science content must include content in anatomy, physiology, chemistry, biochemistry, microbiology, immunology, general pathology and/or pathophysiology, nutrition and pharmacology.

Dental sciences content must include tooth morphology, head, neck and oral anatomy, oral embryology and histology, oral pathology, radiography, periodontology, pain management, and dental materials.

Graduates must be competent in providing the dental hygiene process of care which includes: Assessment, Planning, Implementation, and Evaluation.

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 <u>may</u> 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.

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. The Core should be taken first or concurrently with the first course in the program. Following the successful completion of the core, the student is eligible to take the National Health Care Foundation Skill Standards Assessment with instructor approval and the completion of a portfolio.

## **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 to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their counselor and/or instructors. Accommodations received in postsecondary education may differ from those received in secondary education. 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.

## **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: <a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>