

# Standards Correlations

## Dental Careers I (8328)

Task	SOL Correlations	HOSA Correlations
<b>Demonstrating Personal Qualities and Abilities</b>		
Demonstrate creativity and innovation.	<p>English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8</p> <p>History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1</p> <p>Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10*</p> <p>Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1</p>	
Demonstrate critical thinking and problem solving.	<p>English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8</p> <p>History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1</p> <p>Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3, 7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10*</p> <p>Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1</p>	

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1	
<b>Demonstrating Interpersonal Skills</b>		
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, VUS.1	
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1	
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1	

Task	SOL Correlations	HOSA Correlations
	History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
<b>Demonstrating Professional Competencies</b>		
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate career- and life-management skills.	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6, 10.1, 10.6, 11.1, 11.6, 12.1, 12.6 History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4	
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1	
Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8	

Task	SOL Correlations	HOSA Correlations
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1	
Demonstrate an understanding of information security.	English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: COM.10	
Maintain working knowledge of current information-technology (IT) systems.	English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17 Science: BIO.1, CH.1, ES.1, PH.1	
Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16 Science: CH.1, ES.1, LS.1, PH.1, PS.1	

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Apply mathematical skills to job-specific tasks.	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHIL.1 Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4, A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1	
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHIL.1	
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHIL.1 Science: 6.1, PH.1, PS.1	
Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHIL.1 Science: CH.1	
<b>Examining All Aspects of an Industry</b>		
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16	
Examine aspects of management within an		

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
industry/organization.		
Examine aspects of financial responsibility within an industry/organization.		
Examine technical and production skills required of workers within an industry/organization.		
Examine principles of technology that underlie an industry/organization.		
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16	
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16	
Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16	
<b>Addressing Elements of Student Life</b>		
Identify the purposes and goals of the student organization.		
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.		

Task	SOL Correlations	HOSA Correlations
Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.		
Identify Internet safety issues and procedures for complying with acceptable use standards.		
<b>Exploring Work-based Learning</b>		
Identify the types of work-based learning (WBL) opportunities.		
Reflect on lessons learned during the WBL experience.		
Explore career opportunities related to the WBL experience.		
Participate in a WBL experience, when appropriate.		
<b>Introducing Dentistry and the Dental Team</b>		
Trace key developments of dentistry from early civilizations to the present, including educational and professional developments in America.	English: 11.5, 11.8  History: WHI 5, WHII 4	HOSA Bowl (HB)  Dental Science (DS)
List the members of a dental team and the characteristics,	English: 11.5, 11.6	Dental Science (DS)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
educational requirements, and responsibilities of each member.		
Describe the roles of professional dental organizations.	English: 11.5, 11.8  History: Govt 15, 16	
<b>Investigating Dental Ethics and Law</b>		
Examine ethical and legal issues related to the practice of dentistry.	English: 11.5  History: Govt 7, 8, 9, 15, 16	
Explain the ADAA Principles of Ethics and Code of Professional Conduct.	English: 11.5  History: Govt 7, 8, 9, 15, 16	Dental Science (DS)
Describe the role of the Virginia Dental Practice Act as it relates to the practice of dentistry.	English: 11.5, 11.8  History: Govt 7, 8, 9, 15, 16	Dental Science (DS)
Explain confidentiality and its connection to the Health Insurance Portability and Accountability Act (HIPAA).	English: 11.3, 11.5, 11.8  History: Govt 7, 8, 9, 15, 16	
<b>Examining Basic Dental-Related Anatomy and Physiology</b>		
Identify anatomical reference systems.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)



<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Identify the bones and major anatomic landmarks of the skull.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Describe the bone structure of cartilage, compact bone, spongy bone, and periosteum.	English: 11.3, 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Describe the gliding hinge action of the temporomandibular joint (TMJ).	English: 11.3, 11.5	HOSA Bowl (HB) Dental Science (DS)
Identify the major muscles of mastication and facial expressions, the extrinsic muscles of the tongue, and the major posterior muscles of the mouth, including the floor of the mouth.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Identify the major veins, arteries, and nerves of the face and mouth.	English: 11.5  History: WHII 4  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Identify the major anatomic landmarks of the oral cavity.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Identify the salivary glands and their ducts.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Explain the anatomy and physiology of body systems and their relationship to the face and neck.	English: 11.5  History: WHII 4  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
<b>Describing Dental Anatomy</b>		
Explain oral embryology and the histology of dentition.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Explain developmental disturbances that may occur during tooth development.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Identify the eruption order for the primary and permanent dentition.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Explain the specialized functions and classifications of the four types of teeth.	English: 11.3, 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Describe the anatomical features of teeth.	English: 11.5	HOSA Bowl (HB)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
	Science: BIO.4	Dental Science (DS)
Identify tooth surfaces.	English: 11.5  Science: BIO.4	HOSA Bowl (HB) Dental Science (DS)
Identify teeth, using the Universal, Federation Dentaire Internationale (FDI), and Palmer Numbering Systems.	English: 11.5	Dental Science (DS)
<b>Recording Patient Information and Assessment</b>		
Demonstrate compliance with the privacy policy of HIPAA when recording patient information.	English: 11.5, 11.8  History: WHII 4	
Manage personal information about a patient.	English: 11.6, 11.7	Dental Science (DS)
Update medical and dental history.	English: 11.5, 11.6, 11.7	Dental Science (DS) Medical Assisting (MA)
Explain the meaning and importance of informed consent.	English: 11.5	Medical Law and Ethics (MLE) Dental Science (DS)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Identify the standards and criteria for patient-record entries.	English: 11.5	Dental Science (DS)
Obtain and record vital signs and observations.		Medical Law and Ethics (MLE) Dental Science (DS)
Document initial findings, including recommended treatment.	English: 11.5, 11.6, 11.7	Dental Science (DS)
Record treatment rendered.		Dental Science (DS)
Obtain intraoral and extraoral images.		Dental Science (DS)
<b>Examining Preventive Dentistry and Nutrition</b>		
Describe how dental decay occurs.	English: 11.5	Dental Science (DS)
Identify risk factors for caries.	English: 11.5	Dental Science (DS)
Identify the methods of detecting decay.	English: 11.5	Dental Science (DS)
Describe systemic conditions associated with periodontal disease.	English: 11.1, 11.5  Science: BIO.4	Dental Science (DS)
Identify risk factors for periodontal disease.	English: 11.5	Dental Science (DS)
Demonstrate the components of preventive dentistry.	English: 11.1	Dental Science (DS)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Describe the roles of systemic and topical fluorides.	English: 11.5	Dental Science (DS)
Identify key nutrients.	English: 11.5	Dental Science (DS) Nutrition (NUT)
Establish a diet for dental health maintenance.	English: 11.1	Dental Science (DS) Nutrition (NUT)
<b>Performing Infection-Control Techniques</b>		
Describe the major groups of microorganisms that cause disease.	English: 11.5, 11.6, 11.7  Science: BIO.4	Pathophysiology (PAT) Dental Science (DS)
Describe the types of diseases caused by microorganisms.	English: 11.5  Science: BIO.4	Pathophysiology (PAT) Dental Science (DS)
Describe ways diseases are transmitted in the dental treatment environment.	English: 11.3, 11.5  Science: BIO.4	Pathophysiology (PAT) Dental Science (DS)
Explain maintenance of aseptic chain in the dental treatment environment.	English: 11.5, 11.6  History: Govt 9, 15	Pathophysiology (PAT) Dental Science (DS)
Demonstrate compliance with governmental regulations and guidelines.	English: 11.3, 11.5, 11.8  History: Govt 9, 15	Pathophysiology (PAT) Dental Science (DS)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Disinfect and/or sterilize dental instruments.		Medical Assisting (MA) Dental Science (DS)
Demonstrate maintenance and sterilization of dental handpieces.	English: 11.5, 11.8	Medical Assisting (MA) Dental Science (DS)
Demonstrate maintenance of the evacuation system.		
Demonstrate maintenance of dental disinfecting/sterilizing equipment, including the renewal of solutions.		Dental Science (DS)
Explain maintenance of the dental unit waterline (DUWL).	English: 11.5, 11.6, 11.7	
<b>Managing Hazardous Chemicals and Waste</b>		
Identify methods of protection against exposure to hazardous chemicals.	English: 11.5	Dental Science (DS)
Comply with the OSHA Hazard Communications Standard.	English: 11.5, 11, 6, 11.7, 11.8  Science: CH.1	
Describe the classification of waste.	English: 11.5	Dental Science (DS)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Demonstrate compliance with governmental regulations regarding the management of hazardous chemicals and waste.	Science: CH.1	Dental Science (DS)
<b>Assisting with Pain Control</b>		
Explain pharmacology terms.	English: 11.5	Pharmacology (PHA) Dental Terminology (DT) Dental Science (DS)
Explain the types of anesthesia used in dentistry.	English: 11.5	Dental Science (DS)
<b>Serving Patients with Special Needs</b>		
Identify special-needs and medically-compromised patients.	English: 11.5	Dental Science (DS)
Describe the management and treatment considerations of special-needs and medically-compromised patients as they relate to dental procedures.	English: 11.5	Dental Science (DS)
Determine fearful patients' physical and emotional needs in order to alleviate anxiety.	English: 11.5	Behavioral Health (BH)
<b>Demonstrating Administrative Functions and Chairside Procedures</b>		
Greet patients.		Dental Science (DS)
Manage records.	English: 11.5, 11.6, 11.7	Dental Science (DS)
Seat and position patients.		Dental Science (DS)

<b>Task</b>	<b>SOL Correlations</b>	<b>HOSA Correlations</b>
Demonstrate ergonomics in the dental setting.	English: 11.5	Dental Science (DS)
Demonstrate maintenance of a clear field.		Dental Science (DS)
Perform oral evacuation.		Dental Science (DS)
Prepare dental dam equipment and materials for use.		Dental Science (DS)
Prepare basic operatory setup.		
Pass and retrieve instruments at chairside.		Dental Science (DS)
Perform a preventive dentistry treatment.	English: 11.1	Dental Science (DS)
Dismiss patients.	English: 11.1  History: Govt 8, 9, 15	Dental Science (DS)