

Standards Correlations

Medical Coding and Billing (8388)

Task	SOL Correlations	HOSA Correlations
Demonstrating Personal Qualities and Abilities		
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>	

Task	SOL Correlations	HOSA Correlations
	<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, AIL.9, AIL.10, AIL.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>	
Demonstrate initiative and self-direction.	<p>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</p> <p>History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p>	
Demonstrate integrity.	<p>English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5</p> <p>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</p>	
Demonstrate work ethic.	<p>English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1</p> <p>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</p> <p>Science: CH.1</p>	
Demonstrating Interpersonal Skills		
Demonstrate conflict-resolution skills.	<p>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</p>	

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	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 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	
Demonstrating Professional Competencies		
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	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	

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skills.	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	
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	

Task	SOL Correlations	HOSA Correlations
	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	

Task	SOL Correlations	HOSA Correlations
	Science: CH.1, ES.1, LS.1, PH.1, PS.1	
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, WHII.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, WHII.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, WHII.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, WHII.1	

Task	SOL Correlations	HOSA Correlations
	Science: CH.1	
Examining All Aspects of an Industry		
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16	
Examine aspects of management within an 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	
Addressing Elements of Student Life		

Task	SOL Correlations	HOSA Correlations
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.		
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.		
Exploring Work-based Learning		
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.		
Understanding the U.S. Healthcare System		
Highlight the major developments in healthcare history.	English: 11.5, 12.5	HOSA Bowl

Task	SOL Correlations	HOSA Correlations
	VUS 14 Govt 7, 8, 9, 15	
Differentiate among the types of health insurance.	English: 11.5, 12.5 Govt 7, 8, 9, 15	
Differentiate among the types of medical care delivery systems.	English: 11.5, 12.5 Govt 7, 8, 9, 15	
Describe the roles and responsibilities of healthcare team members.	English: 11.5, 12.5	Health Career Display
Differentiate among the scope and roles of the Virginia Department of Health Professions and the Virginia Department of Health.	English: 11.5, 12.5 Govt 7, 8, 9, 15	
Examine technological trends in access to healthcare.	English: 11.5, 12.5 VUS 14 Govt 7, 8, 9, 15	Medical Law and Ethics
Describe an indemnity plan.	English: 11.5, 12.5	
Define basic terms found in an insurance contract.	English: 11.3, 11.5, 12.3, 12.5	
Demonstrate the completion of a treatment authorization request form.	English: 11.5, 12.5	

Task	SOL Correlations	HOSA Correlations
Describe how medical limits may affect an insurance carrier's payment on a claim.	English: 11.5, 12.5	
Explain what the Consolidated Omnibus Budget Reconciliation Act (COBRA) is and how it affects coverage for preexisting conditions.	English: 11.5, 12.5 Govt 7, 8, 9, 15	
Identifying Legal and Ethical Issues in Healthcare Practices		
Describe the purpose of Occupational Safety and Health Administration (OSHA) regulations as they relate to working in a medical office.	English: 11.5, 12.5 VUS 8, 14 Govt 7, 8, 9, 15	Medical Law and Ethics
Explain confidentiality and its connection to HIPAA.	English: 11.5, 12.5 Govt 7, 8, 9, 15	Medical Law and Ethics
Identify the principles of medical ethics (e.g., case studies, role playing, and research papers).	English: 11.5, 12.5	Medical Law and Ethics
Conduct research on medical cases, legal or ethical issues, medications, new medical procedures, or malpractice information.	English: 11.5, 11.8, 12.5, 12.8	
Understanding Health Informatics		
Describe the role of technology in the healthcare field.	English: 11.5, 12.5 VUS 14	

Task	SOL Correlations	HOSA Correlations
	Govt 15	
Describe techniques for confidential communication of health/medical information within legal/regulatory guidelines.	English: 11.5, 12.5 Govt 7, 8, 9, 15	Medical Law and Ethics
Demonstrate the assessment of abstracted information from medical records and other documents, applying knowledge of medical terminology.	English: 11.5, 12.5	
Introducing the Electronic Health Record (EHR)		
Define electronic health record (EHR).	English: 11.3, 11.5, 12.3, 12.5	
Explain the core functions of an EHR.	English: 11.5, 12.5	
Identify different formats and components of an EHR.	English: 11.5, 12.5	
Describe a codified EHR system.	English: 11.5, 12.5	
Explain how billing codes are used in an EHR system.	English: 11.5, 12.5	
Understanding Medical Terminology		
Explain how medical terms are developed.	English: 11.5, 12.5	Medical Terminology
Define common medical word roots.	English: 11.3, 11.5, 12.3, 12.5	Medical Terminology
Define common medical word prefixes.	English: 11.3, 11.5, 12.3, 12.5	Medical Terminology

Task	SOL Correlations	HOSA Correlations
Define common medical word suffixes.	English: 11.3, 11.5, 12.3, 12.5	Medical Terminology
Demonstrate pronunciation of medical terms.	English: 11.5, 12.5	Medical Terminology
Apply the components of medical terminology (i.e., prefixes, word roots, suffixes).	English: 11.5, 12.5	Medical Terminology
Understanding Medical Abbreviations		
Explain medical abbreviations related to body systems.	English: 11.5, 12.5	Medical Terminology
Identify medical abbreviations related to diagnostic procedures.	English: 11.5, 12.5	
Explain medical abbreviations related to documentation.	English: 11.5, 12.5	
Identify medical abbreviations related to pharmacology.	English: 11.5, 12.5	
Identify abbreviations related to healthcare regulations and regulatory systems.	English: 11.5, 12.5	
Understanding the History of Medical Coding and Billing		
Research the historical timeline of medical coding and billing.	English: 11.5, 11.8, 12.5, 12.8 VUS 8, 13, 14	
Explain the history of medical coding and billing documents.	English: 11.5, 12.5 VUS 8, 13, 14	HOSA Bowl

Task	SOL Correlations	HOSA Correlations
Describe the basic job requirements of a medical coder.	English: 11.5, 12.5	Health Career Display
Describe the job responsibilities of a medical biller.	English: 11.5, 12.5	Health Career Display
Identify common medical practice staff members and their job titles.	English: 11.5, 12.5	Health Career Display
Understanding Medical Practice Accounting		
Explain the functions of ledger cards and patient statements.	English: 11.5, 12.5	
Explain how to use a daily journal.	English: 11.5, 12.5	
Demonstrate how to post payments to a patient account.	English: 11.5, 12.5	
Demonstrate how to create a payment plan.	English: 11.5, 12.5 VUS 14 Govt 7, 8, 9, 15	
Demonstrate how to make a collection call.	English: 11.5, 12.5	
Process petty cash, a petty cash count slip, and petty cash receipts.	English: 11.5, 12.5	