

Wyoming Department of Education Required Virtual Education Course Syllabus

Sheridan County School District # 1

Program Name	Sheridan County School District #1 Virtual School	Content Area	VE
Course ID	AC14154	Grade Level	9 - 12
Course Name	Medical Terminology	# of Credits	1
SCED Code	14154G1.0011	Curriculum Type	Acellus

COURSE DESCRIPTION

Acellus Medical Terminology provides general study skills and a firm foundation for students preparing for postsecondary education to pursue a career in the medical field. Anatomical instruction is coupled with the investigation of key related terminology not only dealing with “what” but also “why” and “how” allowing students apply the information. Specifically, students explore the structures, functions, and terms related to disease and the bodily systems, including the skeletal, muscular, cardiovascular, lymphatic, respiratory, digestive, nervous, integumentary, endocrine, and reproductive systems. Students learn about specific health care professions and the unique role each plays. Through the study of this material students learn effective deciphering skills enabling them to decode medical terminology they have seen and terminology to which they are yet to be exposed. Medical Terminology is A-G Approved through the University of California.

WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK (Standard/Indicator) Use the Standards and Benchmarks as Spreadsheets
CV12.1.1	College and career-ready students evaluate current knowledge and interests in order to set career goals.
CV12.1.2	College and career-ready students explore careers including outlook, salary, needed training, duties and lifestyle utilizing all available resources including mentors and industry experts.
CV12.1.3	College and career-ready students prepare an educational and career plan to enable them to gain desired knowledge and experience.
CV12.1.4	College and career-ready students demonstrate employability skills that enable them to be responsible and contributing citizens and employees.
CV12.2.1	College and career-ready students communicate clearly, effectively, and with reason.
CV12.2.2	College and career-ready students identify and model integrity, ethical leadership and effective management skills.
CV12.2.4	College and career-ready students apply safe, legal, and responsible use of information and technology as appropriate to the task.
CV12.3.2	College and career-ready students identify trends, forecast possibilities, and explore complex systems and issues.
CV12.3.3	College and career-ready students employ valid and reliable research strategies and apply prior knowledge to solve a problem or complete a project.
CV12.3.4	College and career-ready students demonstrate creativity and innovation while considering the environmental, social, and economic impacts of decisions.
CV12.4.1	College and career-ready students produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (*CCSS W.11.4)
CV12.4.2	College and career-ready students determine the meaning of symbols, key terms, and other content-specific words and phrases as they are used in technical context. (*Adapted from CCSS RL.9.11)
CV12.4.3	College and career-ready students acquire, manipulate, analyze, diagnose, and/or report information, using the appropriate technology.
CV12.5.1	College and career-ready students manage resources to develop, analyze, and implement systems and applications.

CV12.5.2	College and career-ready students productively complete tasks taking constraints, priorities and resources into account.
CV12.5.3	College and career-ready students safely and ethically use current industry-standard tools and emerging technologies.
CV12.5.4	College and career-ready students utilize technology to develop innovative solutions or products.

SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES OBJECTIVES/STUDENT CENTERED GOALS
Unit 1 – Introduction to Medical Terminology	CV12.1.1; CV12.1.2; CV12.1.3; CV12.2.4; CV12.4.2; CV12.4.3;	This unit introduces students to the basic building blocks of terminology, developing study and analysis skills that will prepare them for more advanced studies. Students apply this knowledge to achieve efficiency in basic deciphering techniques to be utilized throughout this course and beyond. Through video, graphics, and textual examples, students are introduced to and practice identifying correct spelling and pronunciation of basic medical terminology building blocks, while analyzing why they are needed and how they interrelate with other parts of the body along with concepts surrounding the key use of medical terms in describing disease conditions. Formative and summative assessment is performed throughout this and all units in this course through quizzes, unit exams, and teacher-supervised activities.
Unit 2 – The Human Body in Health and Disease	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.2; CV12.4.3;	This unit discusses the Anatomic Reference Systems used in when studying the human body and a health career path. Students will also collaborate on group research assignments and build their communications skills through the creation of power point presentations and written outline. Students will develop an understanding of the body planes and why they are important within a health oriented career while mastering directional terms. Students will investigate the major body cavities and membranes. Regional awareness of the anatomy of man is developed, starting with the abdomen and thorax. A foundational understanding of various structures within the body is laid while students are introduced to the bodily systems at work within the body. Throughout this and all units of this course, students will interact with computer-based video, diagrams, and assessments, providing opportunities to enhance their technology skills.

Unit 3 - The Skeletal System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.2; CV12.4.3;	Within this unit students extend their basic knowledge of the skeletal system to reach a firm understanding of its specific structures and how they function. Students will take part in analytical thinking exercises that will require them to choose and then defend a position on related topics. Students investigate the skeletal system; study its joints, the skeleton itself, and the appendicular skeleton. From this depth of understanding students are guided through an exploration of new word parts and pathology terms that are integral to any health profession. Students take part in exercises to test their understanding of these important elements of the skeletal system itself while building analytical terminology enabling them to identify and discuss procedural terms, fractural terminology. Ultimately, students apply these individual building blocks in word building exercises to apply their knowledge of the skeletal system and how it works.
Unit 4 - The Muscular System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.3.2; CV12.4.2; CV12.4.3;	This unit discusses the specific structures, functions, and the importance of the muscular system. Students will be required to analyze a selection of reading assignments, further developing their analytical thinking skills. Students develop a mastery of muscle types while investigating major muscular identification. Additionally, students are led in the discovery of new word parts that pertain to the muscular system. These word parts are integrated into the understanding of muscular pathology and procedural terms. Students integrate this knowledge in a word building exercise discovering the link between this academic knowledge and practical industry application.
Unit 5 - The Cardiovascular System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.2; CV12.4.3; CV12.5.1; CV12.5.2;	Within this unit students extend their knowledge of the cardiovascular system to include a firm understanding of the specific structures and how they relate. Particular importance is placed on the heart and blood vessels and why they work the way they do. Students will develop analytical reading and writing skills through timed exercises requiring them to study several documents and then to compose a written response. The importance of inter-cooperation within the system is stressed and students learn the details of circulation and the electrical system of the heart. Additionally, students participate in a breakdown of human blood and the integral part it plays in maintaining homeostasis. From this, students move to the discovery of new word parts pertaining to the cardiovascular system and incorporate this knowledge into the deciphering of procedural and pathological terms relating to this system. Finally, an integration of their newly obtained knowledge takes place in the form of a word building exercise, during which real life and career connections are made.

Unit 6 - The Lymphatic and Immune Systems	CV12.1.4; CV12.2.1; CV12.2.4; CV12.3.2; CV12.4.1; CV12.4.2; CV12.4.3; CV12.5.4;	In this unit, students explore the lymphatic system, its structures, functions, and why it works. Students will be required to analyze a selection of reading assignments, further developing their analytical thinking skills. New word parts are learned and the mastery of these is extended to an understanding of pathological terms that pertain to the system. Students apply their understanding of the material in the deciphering of procedural terms. Students integrate their lympho-immune knowledge in a word building exercise discovering the link between this academic knowledge and practical industry application. Throughout this and all units of this course, students will interact with computer-based video, diagrams, and assessments, providing opportunities to enhance their technology skills.
Unit 7 - The Respiratory System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	In this unit students continue to add to their academic repertoire by integrating a deep knowledge of the respiratory system and how it works. They start by learning its major structures and functions. Students are then guided through the concepts of ventilation and respiration while learning about the interconnectivity and collaboration of the individual system structures to achieve the system function. Upon this understanding, students place new word parts. Respiratory pathology terms and procedural terms are acquired. Finally, an integration of this knowledge takes place in the form of a word building exercise, during which real life and career connections are made.
Unit 8 - The Digestive System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	This unit discusses the anatomy, specific structures, and functions of the digestive system. Students will develop expository writing and analytical thinking skills through timed reading and writing assignments. The students develop mastery of new word parts associated to the digestive system. Students are then introduced to terms within digestive pathology. Additionally, students discover key procedure terms then integrating these concepts in a word building exercise discovering the link between this academic knowledge and practical industry application.
Unit 9 - The Urinary System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3; CV12.5.3;	Within this unit students extend their knowledge of the urinary system to include a firm understanding of the specific structures and functions contained therein. Students learn the details of new word parts pertaining to the urinary system and incorporate this knowledge into the deciphering of procedural and pathological terms relating to this system. Students will take part in analytical thinking exercises that will require them to choose and then defend a position on related topics. Finally, an integration of their newly obtained knowledge takes place in the form of a word building exercise, during which real life and career connections are made.

Unit 10 - The Nervous System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3; CV12.5.3;	This unit guides students through the discovery of the complex nervous system. They develop a firm understanding of the specific structures and functions contained therein. Particular importance is placed on the Central Nervous System and the individual importance of neurons. The importance of inter-cooperation within the system is stressed as students learn about nerves. From this, students move to the discovery of new word parts pertaining to the nervous system and incorporate this knowledge into the deciphering of pathological terms relating to this system. An emphasis is also placed on the understanding of the levels of consciousness. Finally, students learn the procedural terms of this system before building words by applying the knowledge they have acquired.
Unit 11 - Special Senses: The Eyes and Ears	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	This unit discusses the anatomy and functions of special senses. Students develop their analytical thinking skills through exercises where they must form conclusions based on assigned reading and then defend their choices. Students discover the unique structures of the eyes and ears and how they function. The students develop mastery of new word parts associated to both the eyes and then the ears, separately. Students are then introduced to terms within eye and ear pathology. Additionally, students discover key procedure terms then integrating these concepts in a word building exercise to integrate their knowledge of the special senses.
Unit 12 - Skin: The Integumentary System	CV12.1.4; CV12.2.1; CV12.2.2; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	Within this unit students extend their knowledge of the skin to include a firm understanding of the structure and function of the integumentary system. Students work to identify and grasp new word parts that are applicable specifically to the integumentary system. Pathological terms relating to this system are introduced while particular emphasis is placed on burns and burn identification. Procedural terms are established preparing students to apply their newly obtained knowledge by engaging in the word building exercise.
Unit 13. The Endocrine System	CV12.1.4; CV12.2.1; CV12.2.2; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3; CV12.5.3;	This unit focuses on the endocrine system. Students discover the individual structures of the system and learn of their role in the function and purpose of the endocrine system. Furthermore, students develop mastery of new word parts associated the system before being introduced to pathological and procedural terms within the system. Additionally, students apply these concepts in a word building exercise to integrate their knowledge of the endocrine system.

Unit 14. The Reproductive System	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	This unit teaches about male and female reproductive systems. Students will use analytical thinking and build general study skills by identifying debate arguments from assigned reading materials and also writing down talking points. Students also develop a firm understanding of the specific structures and functions of the male reproductive system, discover new word parts, pathological, and procedural terms that are applicable to the male system. Students then learn about the structures and functions of the female reproductive system, discover new word parts, as well as pathological and procedural terms that are applicable to the female system. Throughout this and all units of this course, students will interact with computer-based video, diagrams, and assessments, providing opportunities to enhance their technology skills.
Unit 15. Pregnancy and Childbirth	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	This unit discusses the anatomy and specific structures that contribute to pregnancy and childbirth. Students delve into key terminology used within the health field to determine maternal medical history. Students compare and contrast terminology used during fetal development and types of pregnancy. Students use analytical thinking apply this terminology to neonate situations and common complications that arise in pregnancy and childbirth. Additionally, students discover key procedure terms then integrating these concepts in a word building exercise. A strong connection is made to application of these terms within the career field.
Unit 16. Diagnostic Procedures	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	In this unit students learn basic diagnostic procedures, beginning with an understanding of terminology used within physical examinations. Student compare and contrast the pros and cons of different exam positions and their impact on specific exams. Students are exposed to the laboratory setting and key terminology used therein. The terminology and application of key procedures are discussed, including biopsies, endoscopy, centesis, and common blood-work. From here, students are introduced to the field of radiology and key imaging techniques and applications. Students compare and contrast the use of imaging options available to a radiology tech. Finally, students examine new word parts and apply this knowledge to common diagnostic procedures.

Unit 17. Pharmacology and Abbreviations	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3; CV12.5.1; CV12.5.2;	In this unit students begin by learning about professions and key terminology within the pharmacology sector. Students will develop analytical reading and writing skills through timed exercises requiring them to study several documents and then to compose a written response. Key pharmacological terms and descriptions are discussed. Student use analytical thinking to identify and apply these key terms to the field of drug administration. Principles of drug administration as well as delivery methods of medication to the body are discussed. Student then move to a discovery of medical abbreviations used across the entire medical field. Students use analytical thinking to apply these critical abbreviations to sectors of the medical field that have been discussed throughout the course, meanwhile real life and career connections are made.
Unit 18. Health Care Professionals /Alternative Medicine	CV12.1.4; CV12.2.1; CV12.2.4; CV12.4.1; CV12.4.2; CV12.4.3;	In this unit student learn about the vast professions in the medical field. Students will be required to analyze a selection of reading assignments, further developing their analytical thinking skills. Students will also learn about specific duties of professional that practice is all fields discussed through the course. Concept integration is included to allow students to truly understand the role and function each profession plays. Students use analytical thinking to identify potential career interests. Students then learn about the subfields of alternative medicine and complementary medicine including acupuncture, energy therapies, and chiropractic's. This unit strongly focuses on helping students to make career connections that will empower them to plan beyond high school.
Unit 19. Pathological Terms	CV12.1.4; CV12.2.1; CV12.2.4; CV12.3.4; CV12.4.2; CV12.4.3; CV12.5.4;	This unit begins with the study of genetics. Students learn the terminology used within the field and their application and importance. Students then build mastery of the terminology related to the study of tissues, the pathology of tissues. Glandular terminology is then discussed. Students compare and contrast the usage of key terminology pertaining to infectious diseases. Common and serious infectious diseases are discussed. Finally, students apply the newly acquired terminology in the discovery of the many types of diseases that exist.

Unit 20. Psychiatry

CV12.1.4;
CV12.2.1;
CV12.2.4;
CV12.3.3;
CV12.4.2;
CV12.4.3;

Students begin this unit with an introduction to psychiatry. The oral communications skills of the students will be also be strengthened through structured debate activity. Students learn the role that a psychiatrist plays and its key differentiation from a psychologist. They then analyze common anxiety disorders and phobias. Additionally, compare and contrast developmental disorders including those found on the autism spectrum. Mental health disorders are discussed. Finally, substance abuse and psychiatric treatments are investigated. Throughout this and all units of this course, students will interact with computer-based video, diagrams, and assessments, providing opportunities to enhance their technology skills.