Orange School District



Medical Terminology

Curriculum Guide – Grades 10, 11 2011 Edition

Approved On:

BOARD OF EDUCATION

Patricia A. Arthur *President* Arthur Griffa *Vice-President*

Members Rev. Reginald T. Jackson

Maxine G. Johnson David Wright

SUPERINTENDENT OF SCHOOLS Ronald Lee

DEPUTY SUPERINTENDENT Dr. Paula Howard Curriculum and Instructional Services

Stephanie Brown

Eunice Y. Mitchell

ADMINISTRATIVE ASSISTANT TO THE SUPERINTENDENT Belinda Scott-Smiley Operations/Human Resources

BUSINESS ADMINISTRATOR

Adekunle O. James

DIRECTORS

Barbara L. Clark, *Special Services* Candace Goldstein, *Special Programs* Candace Wallace, *Curriculum & Testing*

> **Curriculum Contributors** Rhoda Selander Conant

Table of Contents

PHILOSOPHY	4
PURPOSE & VISION	
STANDARDS	5
CURRICULUM GRADES 10-11	7 - 22

Philosophy

Recognizing medical terminology is a foundational necessity for students entering any health career, it is our goal to provide our students with a solid background in an interesting and relevant perspective that can be enjoyable to study. To this end, the use of many interesting paradigms, demonstrations - live or computer generated, and other hands-on activities are an integral part of this course. The goal throughout the course is to foster a solid understanding of medical language that can serve as a foundation for future learning in allied and professional health careers.

Purpose and Vision

The medical terminology curriculum is designed to enhance student language capabilities that began in grades K-9. It is geared toward those students who plan to pursue post-secondary study in allied or professional health careers because they must know how to reason, think critically, make decisions, solve problems, and communicate effectively. Quality health care depends upon each person's ability to work well with others, and this requires a firm understanding of medical language. The curriculum provides a solid foundation in medical terminology through the use of textbooks, workbooks, word games, internet, and other resources. Upon completion of medical terminology, students will be able to use a medical terminology to engage in meaningful conversations with medical workers, to understand and interpret spoken and written language, and to present information, concepts, and ideas.

By the end of the course, the student will be able to identify, spell, pronounce and define root words, prefixes and suffixes common to medical careers. They will be able to combine these word parts to form real medical terms and they will be able to dissect complex medical words in order to define them. The student will also be able to use common abbreviations and appropriate reference materials.

Careers related to medicine, research, health-care and modern medical technology are emphasized throughout the curriculum.

Case studies concerning diseases, disorders and ailments (i.e. real-life applications) are used to reinforce learning and to stimulate inquiry.

The following standards are addressed in Medical Terminology I and II.

9.1 21st-Century Life & Career Skills: All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.

9.3 Career Awareness, Exploration, and Preparation: All students will apply knowledge about and engage in the process of career awareness, exploration, and preparation in order to navigate the globally competitive work environment of the information age.

9.4 Career and Technical Education: All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees.

3.1 Reading: All students will understand and apply the knowledge of sounds, letters, and words in written English to become independent and fluent readers and will read a variety of materials and texts with fluency and comprehension.

3.2 Writing: All students will write in clear, concise, organized language that varies in content ad form for different audiences and purposes.

3.3 Speaking: All students will speak in clear, concise, organized language that varies in content and form for different audiences and purposes.

3.4 Listening: All students will listen actively to information from a variety of sources in a variety of situations.

3.5 Viewing and Media Literacy: All students will view, evaluate, and respond to print, nonprint, and electronic texts and resources.

4.1 Number and Numerical Operations: All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.

4.5 Mathematical Processes: All students will use mathematical processes of problem solving, communication, connections, reasoning, representations,

and technology to solve problems and communicate mathematical ideas.

5.1 Science Practices: All students will understand that science is both a body of knowledge and an evidence-based, model-building enterprise that continually extends, refines, and revises knowledge. The four Science Practices strands encompass the knowledge and reasoning skills that students must acquire to be proficient in science.

A. Understand Scientific Explanations: Students understand core concepts and principles of science and use measurement and observation tools to assist in categorizing, representing, and interpreting the natural and designed world.

C. Reflect on Scientific Knowledge: Scientific knowledge builds on itself over time.

5.3 Life Science: All students will understand that life science principles are powerful conceptual tools for making sense of the complexity, diversity, and interconnectedness of life on Earth. Order in natural systems arises in accordance with rules that govern the physical world, and the order of natural systems can be modeled and predicted through the use of mathematics.

A. Organization and Development: Living organisms are composed of cellular units (structures) that carry out functions required for life. Cellular units are composed of molecules, which also carry out biological functions.

B. Matter and Energy Transformations: Food is required for energy and building cellular materials. Organisms in an ecosystem have different ways of obtaining food, and some organisms obtain their food directly from other organisms.

C. Interdependence: All animals and most plants depend on both other organisms and their environment to meet their basic needs.

D. Heredity and Reproduction: Organisms reproduce, develop, and have predictable life cycles. Organisms contain genetic information that influences their traits, and they pass this on to their offspring during reproduction.

E. Evolution and Diversity: Sometimes, differences between organisms of the same kind provide advantages for surviving and reproducing in different environments. These selective differences may lead to dramatic changes in characteristics of organisms in a population over extremely long periods of time.

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
	CONTENT (What Students should know)	FERFORMANCE TARGETS
How can health care personnel communicate effectively in the workplace since they are dealing with the complexities of the human body and highly technical diagnostic and therapeutic equipment?	Medical Terminology is a specialized language that allows medical personnel to communicate efficiently and effectively in the workplace.	Read and discuss policies and requirements for course. Discuss the teacher and student expectations for the course.
What are the course requirements, expectations, attendance, and participation requirements?	Course syllabus and major objectives, grading, and student evaluation procedures. Discussion of the student learning goals and their relationship to the course and	Complete required forms, including personal biography.
What safety precautions are necessary in the classroom and clinical areas?	employability. Knowledge of proper safety precautions is a prerequisite to classroom and clinical learning explorations.	Discuss classroom safety, emergency and disaster procedures. Follow correct protocol for identifying and reporting safety problems and violations. Discuss ways to report a potential hazard to a supervisor. Complete a safety test based on
NJCCCS:	Identify safety hazards commonly found in a variety of medical settings, including blood borne pathogens and hazardous waste.	workplace safety.
3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A	Review procedures to be followed relating to Standard/Universal Precautions.	
Technology: 8.1		
21st Century Life/Careers: 9.1, 9.3, 9.4		

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
Why is a specialized language like medical terminology a legal necessity?	Legal and ethical components of medical terminology.	Discuss the legal and ethical issues for health-related professionals. Describe how medical documentation is compiled.
What are the basic root words related to the major organs of each body system?	The origin of medical terms. Using medical reference materials. Specialized terms describe the structural organization of the human body.	Explain how medical terms are developed. Demonstrate an awareness of supplemental reference and resource materials, including books, videos, and medical libraries. Appropriately access reference information. Recall the pronunciation, spelling, and definition of common medical roots, prefixes, and suffixes. Utilize word roots, combining forms, prefixes, suffixes, to analyze common medical terms and phrases. Combine word parts to form words. Identify and demonstrate pronunciation of medical terms.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		
Technology: 8.1		
21st Century Life/Careers: 9.1, 9.3, 9.4		

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
Why are anatomic references systems needed to describe the location and function of body parts?	Anatomic terminology is basic to the understanding of human anatomy and physiology.	
	 Regional terms Directional terms Body planes & Sections Body cavities 	Define anatomy and physiology. Use anatomic reference systems to identify the anatomic position, body planes, directions and cavities. Analyze, define, spell, and pronounce medical terms related to the body
What are the terms related to the structural organization of the body?	List the major components of the body Terms related to Body Cells, Tissues, and Organs	structure, body regions, body planes, directions, and cavities. List and identify basic word elements
	 Epithelial Tissue Endocrine vs. exocrine tissue 	related to anatomy and physiology of the body structure, including cells, tissues, and glands. Analyze, define, spell, and pronounce
	 Connective tissue Bone, Cartilage, Fibrous, Blood 	medical terms related to anatomy and physiology of the body structure, including cells, tissues, and glands. Analyze, define, spell, and pronounce
	 Muscle Tissue Skeletal, Smooth, Cardiac Nervous Tissue 	medical terms relating to diagnostic procedures and clinical procedures associated with the body structure.
Why is it necessary to understand genetics and mutation in the field of health care?	 Neurons, Glial Cells 	Recall the pronunciation, spelling, and definition of standard and common abbreviations related to the body
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A	Terminology related to Genetic and Congenital disorders	structure. Utilize standard and common abbreviations used in medical clerical and clinical areas.
Technology: 8.1		Define and discuss mutation, genetic engineering, genetic counseling,

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
21st Century Life/Careers: 9.1, 9.3, 9.4 What terms are specific to the integumentary system and its functions?		congenital disorders. Analyze, define, spell, and pronounce medical terms relating to genetics and congenital disorders.
How can we better understand terms related to diseases of the integumentary system?	Terms related to the Integumentary System, its structure & function: Skin Hair Nails	Recognize, define, spell and pronounce terms related to types of diseases and disease transmission.
How can we dissect words related to the integumentary system so that we can better pronounce, spell, and define them? What clinical procedures are used to diagnose problems related to the	Common Skin Diseases Body membranes: Epithelial, Cutaneous, Mucous, Serous	List the major components of the integumentary system. List and identify basic word elements related to anatomy and physiology of the integumentary system.
integumentary system?		Analyze, define, spell, and pronounce medical terms relating to the integumentary system.
		Discuss the use of medical terms in relation to the integumentary system.
		Analyze, define, spell, and pronounce medical terms relating the integumentary system.
		Analyze, define, spell, and pronounce words related to clinical procedures associated with the integumentary system.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		Review the pronunciation, spelling, and definition of standard and common abbreviations related to the integumentary system.

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
Technology: 8.1		Utilize standard and common abbreviations related to the skin, hair, nails
21st Century Life/Careers: 9.1, 9.3, 9.4		and mucous membranes common in medical clerical and clinical areas.
What terms are related to the structure of the skeletal system?	Skeletal System Terms used to describe structure and	List the major components of the skeletal system.
What terms are related to the structure of individual bones?	 function of bones Axial Skeleton - Identify major bones Appendicular Skeleton - Identify major bones 	List and identify basic word elements related to anatomy and physiology of the skeletal system.
What terms are related to functions of the skeletal system?	Names for types and parts of a bone	Analyze, define, spell, and pronounce medical terms relating to the skeletal system.
What terms describe how bones are formed and maintained?	Terms used for skeletal functions including support, protection, movement, storage and blood cell formation	Discuss the use of medical terms in relation to the skeletal system.
What diseases are associated with the skeletal system?	Terminology to describe bone formation, growth & remodeling, bone markings	Define major pathological conditions of the skeletal system.
What injuries are associated with the skeletal system?	Articulations including synovial, fibrous, and immovable.	Analyze, define, spell, and pronounce words related to clinical procedures
What terms describe how a bone heals?	Pathology of the skeletal system.	associated with the skeletal system.
What clinical procedures are used to diagnose problems related to the skeletal system?	Diagnostic and treatment procedures, including surgery, related to the skeletal system.	Recall the pronunciation, spelling, and definition of standard and common abbreviations related to the skeletal system.
NJCCCS:		
3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		Utilize standard and common abbreviations related to the skeletal
21st Century Life/Careers: 9.1, 9.3, 9.4		system used in medical clerical and clinical areas.

CONTENT (What Students should know)	PERFORMANCE TARGETS
Muscular System Structure 	List the major components of the muscular system.
 Movement 3 types of muscle tissue Skeletal, Smooth, Cardiac 	List and identify basic word elements related to anatomy and physiology of the muscular system.
Functions: movement, maintaining posture, stabilizing joints, generating heat	Analyze, define, spell, and pronounce medical terms relating to the muscular
Terms related to anatomy of a skeletal muscle Terms relate to function of skeletal muscles	system. Discuss the use of medical terms in relation to the muscular system.
Muscle movements Flexion, extension, abduction, adduction, protraction, retraction, elevation, depression. Muscle identification Identify major muscles on a model or diagram Pathology of the muscular system. Diagnostic and treatment procedures, including surgery, related to the muscular	Analyze, define, spell, and pronounce words related to clinical procedures associated with the muscular system. Recall the pronunciation, spelling, and definition of standard and common abbreviations related to the muscular system. Utilize standard and common abbreviations related to the muscular system used in medical clerical and clinical areas.
	14
	 Muscular System Structure Movement Stypes of muscle tissue Skeletal, Smooth, Cardiac Functions: movement, maintaining posture, stabilizing joints, generating heat Terms related to anatomy of a skeletal muscle Terms relate to function of skeletal muscles Muscle Contraction and Relaxation Muscle movements Flexion, extension, abduction, adduction, protraction, retraction, elevation, depression. Muscle identification Identify major muscles on a model or diagram Pathology of the muscular system. Diagnostic and treatment procedures,

9.1, 9.3, 9.4	
	15

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
What terms are used to describe the structure of the nervous system?	Structure & function of the Nervous System Parts of the brain Parts of the spinal cord	Name the parts of the nervous system and discuss the function of each part.
What are the names of structures of the CNS and the PNS?	Sensory and motor pathways	List and identify basic word elements related to anatomy and physiology of the nervous system.
What diseases are associated with the nervous system? What clinical procedures are used to	Names related to the central nervous system and peripheral nervous system; Divisions of each	Analyze, define, spell, and pronounce medical terms relating to the nervous system.
diagnose problems related to the nervous system?	Autonomic nervous system – sympathetic and parasympathetic divisions Sense organs	Discuss the use of medical terms in relation to the nervous system.
	Terms related to the structure and function of each of the sense organs Pathology of the nervous system.	Analyze, define, spell, and pronounce medical terms relating to the nervous system.
	Diagnostic and treatment procedures, including surgery, related to the nervous	Define major pathological conditions of the nervous system.
	system.	Analyze, define, spell, and pronounce words related to clinical procedures associated with the nervous system.
		Review the pronunciation, spelling, and definition of standard and common abbreviations related to the nervous system.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		Utilize standard and common abbreviations used in medical clerical and clinical areas.
Technology: 8.1		
21st Century Life/Careers:		
		16

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
9.1, 9.3, 9.4		
		17

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
KEY ELEMENTS What are the terms used to describe certain organs that are specialized to allow for the input of very specific and detailed information? What pathological conditions affect these organs? What clinical procedures are used to detect and treat abnormalities of the eyes and ears?	CONTENT (What Students should know) Structures and Functions of the Eyes Disorders of the eye and the adnexa Diagnosis and Treatment of Eye Pathology Structures and Functions of the Ears Outer, Middle, and Inner Disorders of the Ears Diagnostic and Treatment of Ear Disorders	List the major components of the special senses, especially the eyes and ears. List and identify basic word elements related to anatomy and physiology of the senses. Analyze, define, spell, and pronounce medical terms relating to the senses. Discuss the use of medical terms in relation to the senses. Analyze, define, spell, and pronounce medical terms relating to pathology of the sensory organs. Analyze, define, spell, and pronounce words related to clinical procedures associated with the senses.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A Technology: 8.1		Review the pronunciation, spelling, and definition of standard and common abbreviations related to the senses. Utilize standard and common abbreviations used in medical clerical and clinical areas. 18

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
21st Century Life/Careers: 9.1, 9.3, 9.4		
9.1, 9.3, 9.4		
		19

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
Why is the endocrine system important?	Overview of Structure and Function of the Endocrine System including Pituitary gland,	List the major components of the endocrine system.
What are the names of the glands in the endocrine system?	Adrenal glands, Thyroid, Parathyroid, Pancreas, Ovaries, and Prostate.	List and identify basic word elements related to anatomy and physiology of the
What are the names of the hormones secreted by each of the glands?	General Pathology and Diagnostic Procedures of the endocrine system	endocrine system.
What are the major functions of the specific glands?	Relate the names of specific glands to the names of the hormones they secrete	Discuss the use of medical terms in relation to the endocrine system.
What pathology is associated with the endocrine system?	Basic Functions of the major hormones	Analyze, define, spell, and pronounce medical terms relating to the endocrine system.
	Pathology of specific glands. Most common disorders related to the	Analyze, define, spell, and pronounce
	hyposecretion or hypersecretion of specific hormones.	medical terms relating to pathology of the sensory organs.
		Analyze, define, spell, and pronounce words related to clinical procedures associated with the endocrine system.
		Review the pronunciation, spelling, and definition of standard and common abbreviations related to the endocrine system.
NJCCCS:		Utilize standard and common abbreviations used in medical clerical and clinical areas.
3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		
Technology: 8.1		
21st Century Life/Careers: 9.1, 9.3, 9.4		
		20

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
What are the functions of the cardiovascular system? What are the names of the structures of the cardiovascular system? What diseases are associated with the circulatory system? What are the clinical diagnostic and treatment procedures associated with the circulatory system?	The Circulatory System, Structures & Functions Basic Anatomy of the heart and blood vessels Blood flow: Pathway through the heart Factors that affect blood flow The cardiac conduction system - Transmission of impulses in the heart Parts of an ECG	List the major components of the cardiovascular system. List and identify basic word elements related to anatomy and physiology of the cardiovascular system. Analyze, define, spell, and pronounce medical terms relating to the cardiovascular system. Discuss the use of medical terms in relation
How do the terms naming blood components relate to their structure	Pathways of circulation Systemic circulation Pulmonary circulation Physiology of circulation Heart sounds and what they mean Hypertension and risk factors	Discuss the use of medical terms in relation to the cardiovascular system. Analyze, define, spell, and pronounce medical terms relating to pathology of the cardiovascular system. Analyze, define, spell, and pronounce words related to clinical procedures associated with the cardiovascular system.
and/or function? What are the major diseases associated with blood?	The terms used for the composition of blood, including plasma and formed elements Functions of blood components Hemostasis; coagulation	Review the pronunciation, spelling, and definition of standard and common abbreviations related to the cardiovascular system. Utilize standard and common abbreviations used in medical clerical and clinical areas.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A Technology: 8.1	Blood types Transfusion reactions	Define formed elements of the blood, hematocrit, hemoglobin, anemia, leukocytes, erythrocytes, thrombocytes, hemophilia, antigen, antibody, hemolysis.
		21

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
21st Century Life/Careers: 9.1, 9.3, 9.4		
9.1, 9.3, 9.4		
		22

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
KEY ELEMENTSWhat are the structures of the lymphatic system?How does the lymphatic system function in helping the body stay healthy?What terminology is specific to the lymphatic system and its functions?How does the lymphatic system function with the circulatory system to maintain fluid balance?What diseases are associated with the lymphatic system?What diagnostic and treatment procedures are used for immune disorders?What is difference between vaccines and antibiotics?	CONTENT (What Students should know) Lymphatic System & Body Defenses Specific body defenses Lymphocytes Antibodies Macrophages Lymphatic structure & function Major organs Function and composition of lymph Vaccines & antibiotics	Describe the anatomy and physiology of the lymphatic system. List the major components of the lymphatic system. List and identify basic word elements related to anatomy and physiology of the lymphatic system. Analyze, define, spell, and pronounce medical terms relating to the lymphatic system. Discuss the use of medical terms in relation to the lymphatic system. Analyze, define, spell, and pronounce medical terms relating to pathology of the lymphatic system. Analyze, define, spell, and pronounce medical terms relating to pathology of the lymphatic system.
antibiotics?		
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A Technology: 8.1		Utilize standard and common abbreviations used in medical clerical and clinical areas. Explain the basic functions of the human immune system, including specific and nonspecific immune response, vaccines,
		23

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
		and antibiotics.
21st Century Life/Careers: 9.1, 9.3, 9.4		
9.1, 9.3, 9.4		
		24
		27

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
What are the terms to describe the structures of the respiratory system and how they function?	Respiratory structure & function Organs of respiratory system	Name the organs of the respiratory system.
How do the respiratory system and circulatory system work together to transport vital gases throughout the	Respiratory physiology Process of ventilation Gas exchange Gas transport	List and identify basic word elements related to anatomy and physiology of the respiratory system.
body? What diseases are associated with the	Mechanisms that control ventilation Major diseases of the respiratory system	Analyze, define, spell, and pronounce medical terms relating to the respiratory system.
respiratory system?	Diagnostic Tests and Treatment Procedures associated with the Respiratory system	Discuss the use of medical terms in relation to the respiratory system.
		Analyze, define, spell, and pronounce medical terms relating the respiratory system.
		Analyze, define, spell, and pronounce words related to clinical procedures associated with the respiratory system.
		Review the pronunciation, spelling, and definition of standard and common abbreviations related to the respiratory system.
		Utilize standard and common abbreviations used in medical clerical and clinical areas.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		
Technology: 8.1		
		25

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
21st Century Life/Careers: 9.1, 9.3, 9.4		
9.1, 9.3, 9.4		
		26

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
What are the structures of the digestive system which function to provide the body with vital nutrients?	Digestive System, Structure & Function Alimentary canal Accessory organs	List the major components of the digestive system.
What diseases are associated with the digestive system?	Mechanical & chemical digestion, absorption Location of each process	List and identify basic word elements related to anatomy and physiology of the digestive system.
What diagnostic tests are used to find disorders of the digestive system?	Terms used to describe how each process works	Analyze, define, spell, and pronounce medical terms relating to the digestive system.
	Accessory Organs of Digestion The function of glucose for energy	Discuss the use of medical terms in relation to the digestive system.
	production Pathology of the Digestive System	Analyze, define, spell, and pronounce medical terms relating to disorders of the digestive system.
	Diagnostic and Treatment procedures of the digestive system	Analyze, define, spell, and pronounce words related to clinical procedures associated with the digestive system.
		Review the pronunciation, spelling, and definition of standard and common abbreviations related to the digestive system.
		Utilize standard and common abbreviations used in medical clerical and clinical areas.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		
Technology: 8.1		
21st Century Life/Careers:		
		27

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
9.1, 9.3, 9.4		
		28

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
What are the names of the structures of the urinary system? What are the terms related to the function	Urinary system, Structure & Function Major organs Histology The nephron unit	Describe the anatomy of the urinary system Including the kidneys, ureters, the urinary bladder and the urethra.
of the urinary system? How does the urinary system filter blood and form urine?	Formation of Urine Filtration, tubular reabsorption, tubular secretion	List and identify basic word elements related to anatomy and physiology of the urinary system.
What diseases are associated with the urinary system? What are the diagnostic tests used to	Components of urine (normal & abnormal) Pathology of the urinary system	Analyze, define, spell, and pronounce medical terms relating to the urinary system.
determine pathology of the urinary system?	Diagnosis and Treatment of urinary disorders	Describe the basic physiology of urine formation by the kidneys.
		Discuss the use of medical terms related to the urinary system. Analyze, define, spell, and pronounce
		medical terms related to specific conditions that involve the urinary system.
		Analyze, define, spell, and pronounce words related to clinical procedures associated with the urinary system.
NJCCCS:		Review the pronunciation, spelling, and definition of standard and common abbreviations related to the urinary system.
3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A Technology: 8.1		Utilize standard and common abbreviations used in medical clerical and clinical areas.
21st Century Life/Careers:		
		29

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
9.1, 9.3, 9.4		
		30

MANCE TARGETS
ic anatomy and male and female tive systems. Pasic word elements my and physiology of the reproductive systems. Spell, and pronounce ated to the male and tive systems.
spell, and pronounce ated to pathology of the reproductive systems. spell, and pronounce clinical procedures he male and female em. unciation, spelling, and dard and common ated to the male and tive systems.
ed in medical clerical s.
31

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
21st Century Life/Careers: 9.1, 9.3, 9.4		
9.1, 9.3, 9.4		
		22
		32

KEY ELEMENTS	CONTENT (What Students should know)	PERFORMANCE TARGETS
Describe the process of human development from fertilization to birth and major changes that occur in each trimester of pregnancy.	Pregnancy & Fetal development	Describe the process of human development from fertilization to birth and major changes that occur in each trimester of pregnancy.
Analyze how hereditary and family history can impact personal health.		Analyze how hereditary and family history can impact personal health.
		List the major components of obstetrics and neonatology.
		List and identify basic word elements related to anatomy and physiology of obstetrics and neonatology.
		Analyze, define, spell, and pronounce medical terms relating to obstetrics and neonatology.
		Discuss the use of medical terms in relation to obstetrics and neonatology.
NJCCCS: 3.1, 3.2, 3.3, 3.4, 5.1C, 5.3A		Analyze, define, spell, and pronounce medical terms relating to obstetrics and neonatology.
Technology: 8.1		Analyze, define, spell, and pronounce words related to clinical procedures associated with obstetrics and
21st Century Life/Careers: 9.1, 9.3, 9.4		neonatology. Review the pronunciation, spelling, and definition of standard and common abbreviations related to obstetrics and neonatology. Utilize standard and common abbreviations needed in medical clerical
		and clinical areas.
		33