

B. Career Technical Skills						
Class Hours	CC/CVE Hours	CONTENT AREA SKILLS	Foundation Standards	Mention - M Reinforced - R Taught - T	CTE Pathway Standards	Mention - M Reinforced - R Taught - T
25	10	I. Diseases and Infections	* See attached pages that follow			
		<p>A. Students will be able to:</p> <ol style="list-style-type: none"> 1. Define the terms listed in Key Terminology 2. Define a microorganism and give examples of types of microorganisms 3. Explain the difference between a nonpathogen and a pathogen 4. List the six basic requirements needed for growth and multiplication of microorganisms 5. Outline the Infection Process Cycle, including the following: <ol style="list-style-type: none"> a. Give examples of the means of entry of microorganisms into the body b. Give examples of the means of transmission of microorganisms from one person to another c. Give examples of the means of exit of microorganisms from the body d. List and explain five protective mechanisms the body uses to prevent the entrance of microorganisms 6. Define medical asepsis 7. Explain the difference between residence flora and transient flora 8. List and describe the three types of hand washing agents 9. Identify six medical aseptic practices that should be followed in the medical office 10. Explain how proper hand washing helps prevent the transmission of microorganisms 11. Explain the principles underlying each step in the hand washing procedure 12. Explain the purpose of OSHA 	<p>1.2(1.a)</p> <p>1.2(10.d)</p> <p>1.2(10.d)</p> <p>1.2(1.a)</p> <p>1.2(10.d)</p> <p>1.2(10.d)</p> <p>1.2(10.d)</p> <p>1.2(10.d)</p> <p>1.2(10.d)</p> <p>6.2</p> <p>6.3</p> <p>6.3</p> <p>6.3</p> <p>6.3</p> <p>6.3</p> <p>6.3</p> <p>6.5</p>	<p>MR</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>MR</p>	<p>B1.2</p> <p>D2.3</p> <p>D2.2</p> <p>A2.4</p> <p>B3.2</p> <p>B3.2</p> <p>B3.2</p> <p>B3.2</p> <p>B3.1</p> <p>B3.2</p> <p>D2.1</p> <p>D2.1</p> <p>D2.1</p> <p>D2.1</p> <p>D2.4</p>	<p>T</p> <p>T</p> <p>T</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>TR</p> <p>T</p> <p>T</p> <p>T</p> <p>T</p> <p>T</p>

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		<p>13. List and describe the elements that must be included in the OSHA Exposure Control Plan</p> <p>14. Define and give examples of each of the following: engineering controls, work practices controls, personal protective equipment, and housekeeping procedures</p> <p>15. Identify six guidelines that must be followed when using personal protective equipment</p> <p>16. Identify the means of transmission of hepatitis B in the health-care setting</p> <p>17. Explain the difference between acute and chronic hepatitis B</p> <p>18. Describe the treatment for individuals exposed to hepatitis B</p> <p>19. List and describe each of the four stages of the AIDS virus infection cycle</p> <p>20. List and describe five AIDS-defining conditions</p> <p>21. Explain how HIV is transmitted</p>	6.5 6.2 6.1 6.3 6.3 6.3 6.3 6.3	R MR R R R R R	D2.4 D2.1 D2.3 D2.1 D2.1 D2.1 D2.1	T T T T T T T
25	20	II. Medical Records				
		<p>A. Students will be able to:</p> <p>1. Define the terms listed in the Key Terminology</p> <p>2. List and describe the functions served by the medical record</p> <p>3. Identify the information contained in each of the following medical office administrative documents: patient, registration, record, and correspondence</p> <p>4. Identify the information contained in each of the following medical office clinical documents: health history, physical examination, progress notes, medication record, consultation report, and home health care report</p> <p>5. List and describe the information included in the following diagnostic documents: electrocardiogram report, Holter monitor report, sigmoidoscopy report, spirometry report, radiology report, and imaging report</p>	2.3 (f) 2.5 2.6 2.5 2.5	MR R R R R	C1.2 C3.1 C3.2 C3.5 C3.4	T T T T T

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		6. State the purpose of each of the following therapeutic services: physical therapy, occupational therapy, and speech therapy	2.6 (b)	R	C5.3	T
		7. Identify the information contained in the following hospital documents: history and physical, operative report, discharge summary report, pathology report, and emergency room report	2.5	R	C4.2	RT
		8. Identify the information contained in the following consent documents: consent to treatment form and consent to release information form	2.3 (b)	R	C4.1	RT
		9. Describe the organization of a source-oriented medical record and a problem-oriented medical record	2.5	R	C3.2	T
		10. List and define the four subcategories included in the progress notes of a problem-oriented medical record (POR)	2.6(1.6)	R	C4.3	T
		11. Explain the difference between a paper-based patient record (PPR) and a computer-based patient record (CPR)	2.6(1.7)	R	C4.4	T
		12. List and describe the seven parts of the health history	2.6(1.8)	R	E2.1	T
		13. List the guidelines that should be followed in recording the chief complaint	2.4(d)	R	E2.1	T
		14. List and describe the guidelines to follow to ensure accurate and concise charting	2.4(d)	R	E4.2	T
		15. List and describe the types of progress notes that are charted by the medical assistant	2.4(d)	R	E4.3	T
		16. List examples of subjective symptoms and objective symptoms	2.4(d)	R	C3.1	T
		17. List and describe common symptoms	2.6(1.7)	R	C3.1	T

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30	30	III. Vital Signs				
		<p>A. Students will be able to:</p> <ol style="list-style-type: none"> 1. Define the terms listed in the Key Terminology 2. Define a vital sign 3. Explain the purpose for taking vital signs 4. Explain how body temperature is maintained 5. Give examples of four ways in which heat is produced in the body and four ways in which heat is lost from the body 6. State the normal body temperature range and the average body temperature 7. List and explain four factors that can cause a variation in the body temperature 8. List and describe the three stages of a fever 9. List the four sites for taking body temperature and explain why these sites are used 10. List and describe the four types of thermometers 11. List and describe the guidelines that should be followed when using a tympanic membrane thermometer 12. Explain the principles underlying each step in the body temperature procedures 13. Explain the mechanism of pulse 14. List and explain the factors that affect the pulse rate 15. Identify one use of each of the eight pulse sites 16. State the normal range for pulse rate for each of the various age groups 17. Explain the difference between pulse rhythm and pulse volume 18. Explain the principles underlying each step in the radial and apical pulse procedures 19. Explain the purpose of respiration 20. State what occurs during inhalation and exhalation 	<p>2.5 1.2(9b)</p> <p>1.2(9b) 1.2(9b)</p> <p>1.2(9b)</p> <p>1.2(9b)</p> <p>1.2(9b)</p> <p>4.5</p> <p>4.5</p> <p>4.5</p> <p>4.2</p> <p>10.6</p> <p>10.6</p> <p>10.6</p> <p>10.6</p> <p>1.2(9g) 1.2(9g)</p>	<p>R R</p> <p>R R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p> <p>R</p>	<p>B1.2 B2.2</p> <p>B2.2 B2.1</p> <p>B2.1</p> <p>C4.4</p> <p>B2.2</p> <p>C3.1</p> <p>B2.1</p> <p>B2.2</p> <p>B3.3</p> <p>E4.1</p> <p>B3.1</p> <p>B3.2</p> <p>B3.1</p> <p>B3.1</p> <p>B3.1</p> <p>B3.1</p> <p>B2.1 B2.3</p>	<p>T RT</p> <p>RT RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>T</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p> <p>RT</p>

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		21. State the normal respiratory rate for each of the various age groups		1.2(5.b)	R	E2.1	T
		22. List and explain three factors that affect the respiratory rate		1.2(5.b)	R	E3.5	T
		23. Explain the difference between the rhythm and depth of respiration		1.2(5.b)	R	E5.1	T
		24. Describe the character of the following abnormal breath sounds: stertor, stridor, crackles, gurgles, wheezes, and pleural friction rub		1.2(5.b)	R	E2.2	T
		25. Explain the principles underlying each step in the procedure for measuring respiration		1.2(5.b)	R	E4.1	T
		26. Define blood pressure		1.2(5.b)	R	B2.1	T
		27. State the normal range for blood pressure for an adult		1.2(9.b)	R	B1.1	T
		28. List and describe four factors that affect the blood pressure		1.2(9.b)	R	B2.1	T
		29. Identify the different parts of a stethoscope and a sphygmomanometer		1.2(9.b)	R	E3.4	T
		30. Identify the Korotkoff sounds		1.2(9.b)	R	E4.1	T
		31. Explain how to prevent errors in blood pressure measurement		1.2(9.b)	R	E4.2	T
		32. Explain the principles underlying each step in the blood pressure procedure		1.2(9.b)	R	E4.2	T
30	30	IV. Patient Examinations					
		A. Students will be able to:					
		1. Define the terms listed in the Key Terminology		2.5	R	E2.2	T
		2. Identify the three components of a complete patient examination		7.7	R	E3.3	T
		3. List the guidelines that should be followed in preparing the examining room		7.7	R	E3.2	T
		4. Identify equipment and instruments used during the physical examination		6.2	R	E3.4	T
		5. Explain the purpose of measuring weight		7.7	R	E3.3	T
		6. List the guidelines that should be followed when measuring weight and height		7.7	R	E3.4	T

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		7. Explain the purpose of positioning and draping	7.7	R	E3.1	T
		8. List and define the four techniques of examining the patient. State an example of the use of each during the physical examination	7.7	R	E2.1	T
25	20	V. Sterilization and Sanitation				
		A. Students will be able to:				
		1. Define the terms listed in the Key Terminology	6.1	R	E2.2	T
		2. Explain the purpose of the Hazard Communications Standard	6.3	R	D2.1	T
		3. List and describe the information that must be included on the container label of a hazardous chemical	6.1	R	D2.4	T
		4. List and describe the information that must be included in a materials safety data sheet (MSDS)	6.1	R	D2.4	T
		5. State the purpose of sanitization	6.3	R	D2.2	T
		6. State the advantages of using an ultrasonic cleaner to clean instruments	6.2	R	D2.2	T
		7. List and describe the guidelines that should be followed when sanitizing instruments	6.2	R	D2.2	T
		8. State the use of the three levels of disinfection: high-level disinfection, intermediate-level disinfection, and low-level disinfection	6.1	R	D2.2	T
		9. Explain the difference among the following: critical item, semi-critical item, and noncritical item	6.2	R	D2.3	T
		10. List and describe the guidelines that should be followed when disinfecting articles	6.2	R	D2.3	T
		11. List and describe the primary use for the disinfectants used in the medical office	6.1	R	D2.3	T
		12. Explain how the autoclave functions to sterilize articles	6.2	R	D2.2	T
		13. List the components of a sterilization monitoring program	6.2	R	D2.4	T
		14. List and describe types of sterilization indicators	6.2	R	D2.5	T

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		15. Identify the advantages and disadvantages of the following types of wraps: sterilization paper, sterilization pouches, muslin	6.2	R	D2.2	T
		16. List the principles that should be followed when the autoclave is loaded	6.1	R	D2.2	T
		17. Identify the sterilization times for each of the following categories: unwrapped articles, wrapped articles, liquids, large wrapped articles	6.2	R	D2.2	T
		18. Describe the method for storing wrapped articles	6.2	R	D2.3	T
		19. Describe the daily, weekly, and monthly maintenance of the autoclave	6.3	R	D2.4	T
		20. State the primary use of the following types of sterilization methods: dry heat, ethylene oxide gas, chemicals, and radiation	6.2	R	D2.3	T
20	20	VI. Surgical Procedures				
		A. Students will be able to:				
		1. Define the terms listed in the Key Terminology	2.5	T	E2.2	T
		2. Identify four types of procedures that require the use of surgical asepsis	6.3	R	E3.1	RT
		3. Describe the medical assistant's responsibilities during a minor surgical procedure	10.5	R	E2.1	RT
		4. List five guidelines that should be observed during a sterile procedure in order to maintain surgical asepsis	6.2	R	E3.5	RT
		5. Identify and explain the use and care of instruments commonly used for minor office surgery	6.2	R	E3.4	RT
		6. Explain the difference between a closed and an open wound, and give an example of one type of closed wound and four types of open wound	10.3	R	E4.2	RT
		7. List and explain the three phases involved in the healing process	10.3	R	E4.3	RT
		8. List and describe the different types of wound drainage	1.2(10.b)	R	D2.1	RT
		9. List two functions of a dressing	10.6	R	D2.5	RT

		10. Explain the method used to measure the	6.2	R	E3.4	T
		11. diameter of suturing material	6.2	R	E3.4	T
		12. Describe the two different types of sutures (absorbable and non-absorbable), and give examples of uses for each	6.2	R	D3.1	T
		13. Categorize suturing needles according to their type of point and their shape	6.2	R	D2.5	T
		14. Explain the purpose of and procedure for each of the following minor surgical operations: sebaceous cyst removal, incision and drainage of a localized infection, needle biopsy, ingrown toenail removal, colposcopy, cervical punch biopsy, and cryosurgery	6.1	R	E3.2	T
		15. State three functions of a bandage, and list four guidelines that should be observed when applying a bandage	7.7	R	E3.2	T
		16. Identify the common types of bandages used in the medical office	7.7	R	E5.1	T
		17. Explain the use of a tubular gauze bandage	7.7	R	E2.1	T
		18. Explain the principles underlying each step in the minor office surgery procedures	7.7	R	E1.1	T

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		<p>17. Explain the principle underlying each step in the procedures for administering oral and parenteral medication and for performing a tine test</p> <p>18. Explain the purpose and method of performing each of the following types of allergy tests: patch testing, scratch testing, intradermal skin testing, and RAST testing</p>	10.3	R	E3.2	T
			10.2	R	E1.3	T
20	15	VIII. Optometry and Audiology				
		<p>A. Student will be able to:</p> <p>1. Define the terms listed in the Key Terminology</p> <p>2. List four tests or procedures that are performed on the eye and ear in the medical office</p> <p>3. Identify the structures that constitute the eye, and explain the function of each</p> <p>4. Define visual acuity</p> <p>5. State the causes of myopia, hyperopia, and presbyopia, and indicate what visual difficulty is present with each</p> <p>6. Explain the difference among an ophthalmologist, an optometrist, and an optician</p> <p>7. Explain the significance of the top and bottom numbers next to each line of letters on the Snellen eye chart</p> <p>8. Explain the difference between congenital and acquired color vision defects</p> <p>9. State three reasons each for performing an eye irrigation and an eye instillation</p>	2.5	R	E2.2	T
			4.5	R	E3.4	RT
			1.2(5.g)	R	E2.2	RT
			4.2	R	E2.1	RT
			4.2	R	E4.1	RT
			4.2	R	B5.1	RT
			4.5	R	E3.4	RT
			10.4	R	E3.3	RT
			1.2(5.g)	R	E4.2	RT

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		<p>10. Explain the principles underlying the steps in each eye procedure</p> <p>11. Identify the structures making up the external, middle, and outer ear and explain the function of each</p> <p>12. Identify conditions that may cause conductive and sensorineural hearing loss</p> <p>13. List and describe three ways hearing acuity may be tested</p> <p>14. State three reasons each for performing an ear irrigation and an ear instillation</p> <p>15. Explain the principles underlying the steps in each ear procedure</p>	10.3	R	E4.3	T
			1.2(5.g)	R	A2.3	T
			1.2(5.g)	R	E5.1	T
			10.3	R	E3.4	T
			6.2	R	E3.3	T
			6.3	R	E4.1	T
200	160	Total Hours				

C. Expected Student Proficiencies	
<p>ATTITUDE AND WORK HABITS Works both independently and collaboratively Attends regularly and on time Practices good safety procedures Solves problems thinks critically and makes good decisions Plans work and takes initiative Demonstrates leadership and the willingness to help train others</p> <p>CAREER PREPARATION SKILLS Identifies appropriate careers and resources for training Identifies job resources Demonstrates interview skills Demonstrates knowledge of techniques for getting a job</p> <p>PATIENT EXAMINATIONS Greeting and Identification Medical history and records Position and drape Infants</p> <p>PATIENT VITALS Height Weight Temperature Pulse Respiration Blood Pressure</p> <p>CLINICAL ASSISTANCE Routine examination Specialty Basic minor surgery Post-operative cleaning procedures Instruments for standard office procedures Room preparation for standard office procedures</p>	<p>APPLICATIONS EKG Dressings and Bandages First Aid</p> <p>CLINICAL PRACTICES Universal blood precautions Universal body fluid Medical and surgical asepsis Audiometry testing Measure distance visual acuity</p> <p>CLINICAL PROCEDURES AND TESTS Injections Hematocrit tests Urine tests Glucose tests</p> <p>KNOWLEDGE Medical Ethics Medicine and the Law Medical Terminology</p> <p>VENIPUNCTURE Vacuum tube method Syringe method Butterfly method</p>

10. ADDITIONAL RECOMMENDED/OPTIONAL ITEMS

A. **Academic credit:** Two semester program (12 units of Gavilan credit)

B. **Other – n/a**

ARTICULATION None

UC APPROVAL None

INDUSTRY CERTIFICATION None

C. **Instructional Strategies:**

- Lecture
- Demonstration
- Design problems and vocabulary
- Critical comparison
- Readings
- Project-based learning
- Work-based learning
- Simulations
- Group projects
- Field trips
- Videos
- Internet research
- Peer learning

D. **Instructional Materials:**

K. Bonewit-West, Clinical Procedures for Medical Assistants, W. B. Saunders Company, 2004
Chabner, Medical2003. Terminology: A Short Course,

11. FOUNDATION STANDARDS ALIGNED

1.0 Academics

Students understand the academic content required for entry into postsecondary education and employment in the Engineering and Design sector. *(The standards listed below retain in parentheses the numbering as specified in the mathematics, science, history–social science, and visual and performing arts content standards adopted by the State Board of Education.)*

Math Specific applications of Measurement and Geometry standards (grade seven):

- * (1.1) Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters).
- * (1.3) Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.

History/Social Science Specific applications of United States History and Geography: Continuity and Change in the Twentieth Century standards (grade eleven):

- (11.8.7) Describe the effects on society and the economy of technological developments since 1945, including the computer revolution, changes in communication, advances in medicine, and improvements in agricultural technology.
- (11.11.7) Explain how the federal, state, and local governments have responded to demographic and social changes such as population shifts to the suburbs, racial concentrations in the cities, Frostbelt-to-Sunbelt migration, international migration, decline of family farms, increases in out-of-wedlock births, and drug abuse.

2.0 Communications

Students understand the principles of effective oral, written, and multimedia communication in a variety of formats and contexts. *(The standards listed below retain in parentheses the numbering as specified in the English–language arts content standards adopted by the State Board of Education.)*

Reading Specific applications of Reading Comprehension standards (grades nine and ten):

- (1.1) Identify and use the literal and figurative meanings of words and understand word derivations.
- (2.3) Generate relevant questions about readings on issues that can be researched.

Writing Specific applications of Writing Strategies and Applications standards (grades nine and ten):

- (2.3) Write expository compositions, including analytical essays and research reports:
 - a. Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives.
 - b. Convey information and ideas from primary and secondary sources accurately and coherently.
 - c. Make distinctions between the relative value and significance of specific data, facts, and ideas.
 - d. Include visual aids by employing appropriate technology to organize and record information on charts, maps, and graphs.
 - e. Anticipate and address readers' potential misunderstandings, biases, and expectations.
 - f. Use technical terms and notations accurately.

Written & Oral English Language Conventions Specific applications of English Language Conventions standards (grades nine and ten):

- * (1.1) Identify and correctly use clauses (e.g., main and subordinate), phrases (e.g., gerund, infinitive, and participial), and mechanics of punctuation (e.g., semicolons, colons, ellipses, hyphens).
 - * (1.2) Understand sentence construction (e.g., parallel structure, subordination, proper placement of modifiers) and proper English usage (e.g., consistency of verb tenses).
 - * (1.3) Demonstrate an understanding of proper English usage and control of grammar, paragraph and sentence structure, diction, and syntax.
 - (1.4) Produce legible work that shows accurate spelling and correct use of the conventions of punctuation and capitalization.
 - (1.5) Reflect appropriate manuscript requirements, including title page presentation, pagination, spacing and margins, and integration of source and support material (e.g., in-text citation, use of direct quotations, paraphrasing) with appropriate citations.
- Specific applications of English Language Conventions standards (grades eleven and twelve):
- (1.1) Demonstrate control of grammar, diction, and paragraph and sentence structure and an understanding of English usage.
 - (1.2) Produce legible work that shows accurate spelling and correct punctuation and capitalization.

Listening & Speaking Specific applications of Speaking Applications standards (grades nine and ten):

- (2.3) Apply appropriate interviewing techniques:
- Prepare and ask relevant questions.
 - Make notes of responses.
 - Use language that conveys maturity, sensitivity, and respect.
 - Respond correctly and effectively to questions.
 - Demonstrate knowledge of the subject or organization.
 - Compile and report responses.
 - Evaluate the effectiveness of the interview.

3.0 CAREER PLANNING & MANAGEMENT

Students understand how to make effective decisions, use career information, and manage personal career plans:

- Know the personal qualifications, interests, aptitudes, knowledge, and skills necessary to succeed in careers.
- Understand the scope of career opportunities and know the requirements for education, training, and licensure.
- Develop a career plan that is designed to reflect career interests, pathways, and postsecondary options.
- Understand the role and function of professional organizations, industry associations, and organized labor in a productive society.
- Understand the past, present, and future trends that affect careers, such as technological developments and societal trends, and the resulting need for lifelong learning.
- Know important strategies for self-promotion in the hiring process, such as job applications, résumé writing, interviewing skills, and preparation of a portfolio.

4.0 TECHNOLOGY

Students know how to use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments:

- Understand past, present, and future technological advances as they relate to a chosen pathway.
- Understand the use of technological resources to gain access to, manipulate, and produce information, products, and services.
- Understand the influence of current and emerging technology on selected segments of the economy.
- Understand the impact of enhanced technology, bioethics, epidemiology, and socioeconomics on the health care delivery system.
- Know how to interpret technical materials and medical instrumentation used for health care practices and policies.

5.0 PROBLEM SOLVING & CRITICAL THINKING

Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking, and problem-solving techniques:

- Understand the systematic problem-solving models that incorporate input, process, outcome, and feedback components.
- Use critical thinking skills to make informed decisions and solve problems.
- Examine multiple options for completing work tasks by applying appropriate problem-solving strategies and critical thinking skills to work-related issues.

6.0 HEALTH & SAFETY

Students understand health and safety policies, procedures, regulations, and practices, including the use of equipment and handling of hazardous materials:

- Know the policies, procedures, and regulations regarding health and safety in the workplace, including employers' and employees' responsibilities.
- Understand critical elements for health and safety practices related to storing, cleaning, and maintaining tools, equipment, and supplies.
- Understand the importance and use of standard precautions and infection control, as appropriate.
- Understand the principles of body mechanics and ergonomics in providing patient care.
- Understand the rules and regulations of the Occupational Safety and Health Administration and the Centers for Disease Control and Prevention.

7.0 RESPONSIBILITY & FLEXIBILITY

Students know the behaviors associated with the demonstration of responsibility and flexibility in personal, workplace, and community settings:

- 7.1 Understand the qualities and behaviors that constitute a positive and professional work demeanor.
- 7.2 Understand the importance of accountability and responsibility in fulfilling personal, community, and workplace roles.
- 7.3 Understand the need to adapt to varied roles and responsibilities.
- 7.4 Understand that individual actions can affect the larger community.
- 7.5 Know how to interact appropriately and respectfully in various employment situations that involve persons from diverse ethnic, generational, cultural, religious, and economic groups and persons of different genders and sexual orientation.
- 7.6 Know and appreciate cultural differences and provide culturally competent care to patients and clients.
- 7.7 Understand and demonstrate methods for promoting health and wellness.

8.0 ETHICS & LEGAL RESPONSIBILITY

Students understand professional, ethical, and legal behavior consistent with applicable laws, regulations, and organizational norms:

- 8.1 Know the major local, district, state, and federal regulatory agencies and entities that affect the industry and how they enforce laws and regulations.
- 8.2 Understand the concept and application of ethical and legal behavior consistent with workplace standards.
- 8.3 Understand the role of personal integrity and ethical behavior in the workplace.
- 8.4 Understand the ways in which ethical considerations affect emerging technologies and their impact on society.
- 8.5 Understand and maintain the Patients' Bill of Rights, patients' and clients' confidentiality, and the Health Insurance Portability and Accountability Act of 1996.

9.0 LEADERSHIP & TEAMWORK

Students understand effective leadership styles, key concepts of group dynamics, team and individual decision making, the benefits of workforce diversity, and conflict resolution:

- 9.1 Understand the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace settings.
- 9.2 Understand the ways in which preprofessional associations, such as the Health Occupations Students of America, and competitive career development activities enhance academic skills, promote career choices, and contribute to employability.
- 9.3 Understand how to organize and structure work individually and in teams for effective performance and the attainment of goals.
- 9.4 Know multiple approaches to conflict resolution and their appropriateness for a variety of situations in the workplace.
- 9.5 Understand how to interact with others in ways that demonstrate respect for individual and cultural differences and for the attitudes and feelings of others.

10.0 TECHNICAL KNOWLEDGE & SKILLS

- 10.1 Understand the process for determining mission statements, goals, objectives, and strategic plans for a health care organization and understand the process for using appropriate policies, procedures, and processes as defined by the scope of practice of a specific health care organization.
- 10.2 Understand how the health care delivery systems models can be affected by cost, managed care, technology, an aging population, access to care, alternative therapies, and lifestyle and behavior changes.
- 10.3 Understand the purpose and function of a systems-theory approach, both in the health care organization and in the treatment of patients and clients, as a process for viewing a system as a whole before examining its parts.
- 10.4 Understand the interconnected components of a health care system.
- 10.5 Understand the nature of the interdependency of health care professionals within a given health care delivery system.
- 10.6 Know cardiopulmonary resuscitation and first-aid practices.
- 10.7 Understand the processes used to evaluate alternative health practices.

11.0 DEMONSTRATION & APPLICATION

Students demonstrate and apply the concepts contained in the foundation and pathway standards.

12. A. Biotechnology Research and Development Pathway

The standards for the Biotechnology Research and Development Pathway apply to occupations and functions in biotechnology research and development that apply primarily to human health. The standards specify the knowledge and skills common to occupations in this pathway.

A2.0 Students know the fundamentals of mathematical and scientific concepts related to biotechnology:

A2.1 Understand basic mathematical concepts related to the field, such as the calculation of percentages and ratios and the difference between standard deviation and various measures of central tendency.

A2.3 Know the basic structures and functions of cells and how this knowledge is used in biotechnology.

B. Diagnostic Services Pathway

The standards for the Diagnostic Services Pathway apply to occupations or functions involved primarily in creating a picture of the health status of patients at a single point in time. The standards specify the knowledge and skills needed by professionals pursuing careers in this pathway.

B5.0 Students understand requests for procedures and know how to interpret the requests, plan the coordination and implementation of services, and prepare for specific procedures:

B5.1 Understand scope of practice, evaluate requests for appropriateness, and coordinate interdisciplinary services.

B5.2 Use appropriate protocol after assessing patients, clients, and resources.

C. Health Informatics Pathway

The standards for the Health Informatics Pathway apply to occupations or functions that document patient care. The standards specify the knowledge and skills needed by professionals pursuing careers in this pathway.

C1.0 Students know the process established by the facility for communicating confidential health and medical information accurately and within the legal and regulatory guidelines:

C1.1 Know the process for managing the timely transfer of information accurately and effectively to the appropriate parties.

C1.2 Know the legal and regulatory requirements for the transfer of information.

C3.0 Students understand the content and diverse uses of health information and the use of legal and regulatory guidelines to maintain, store, and communicate accurate and appropriate information:

C5.0 Students know how to read, interpret, and extract information from medical and other documents:

LEGEND FOR REFERENCE OF ACADEMIC STANDARDS

Parenthetical notation preceding the content standard item refers to the grade level for the standard. i.e. (8) refers to grade 8, (9-10) refers to grades 9 & 10.

Example: (8) W2.1 refers to the Eighth Grade Writing Standard Item 2.1

English-Language Arts:

R Reading
W Writing
WOC Written & Oral Conventions
LS Listening & Speaking

CRP: Connections, Relationships,
Proficient
CRA: Connections, Relationships,
Advanced

Mathematics:

NS Number Sense
AF Algebra & Functions
SDP Statistics, Data Analysis & Probability
MR Mathematical Reasoning
MG Measurement & Geometry
AI Algebra I
G Geometry
AII Algebra II
P&S Probability & Statistics
APP&S Advanced Placement Probability &
Statistics
C Calculus

ELA: English-Language Arts with in VPA

ELA- LRA: Literary Response and Analysis
ELA-WSA: Writing Strategies &
Applications
ELA-WOELC: Written & Oral English
Language Conventions

Science:

PH Physics
CH Chemistry
ES Earth Science
I&E Investigation and Experimentation

Sectors

AME Arts, Media and Entertainment
BTC Building Trades and Construction
ECDFS Education, Child Development &
Family Services
EU Energy & Utilities
ED Engineering & Design
FID Fashion and Interior Design
FAB Finance and Business
HSMT Health Science & Medical Technology
HTR Hospitality, Tourism & Recreation
IT Information Technology
MPD Manufacturing and Product
Development
MSS Marketing, Sales, & Services
PS Public Services
T Transportation

History-Social Science:

WH World History, Culture and Geography
USH United States History and Geography
AD American Democracy
ECON Economics

Visual and Performing Arts:

APP: Artistic Perception Proficient Level
APA: Artistic Perception Advanced
CEP: Creative Expression Proficient
CEA: Creative Expression Advanced
HCCP: Historical & Cultural Proficient
HCCA: Historical & Cultural Advanced
AVP: Aesthetic Valuing Proficient
AVA: Aesthetic Valuing Advanced