Unit 1: Demonstrating Processes of Infection Prevention and Control

Unit Focus

The unit focus is on understanding the process of infection and contamination and how to prevent contamination. Steps include creating a sterile environment and instruments, using PPE, and proper waste disposal of contaminated material. Students follow and demonstrate CDC guidelines for PPE and proper disposal procedures. Students demonstrate proper procedures to create a sterile environment.

Duration: 2 weeks

Stage 1 – Profile of a Graduate

Develops the behaviors, knowledge, and skills to graduate with the following qualities:

Critical Thinker

Achieves and applies appropriate academic and technical knowledge.

Uses critical reading skills to analyze, interpret, and evaluate.

Demonstrates productive workplace skills, qualities, and behaviors.

Global Collaborator

Engages in constructive dialogue and debate of local, national, and global issues

Stage 2 - Desired Outcomes

Virginia Competencies

- 39 Required Identify Occupational Safety and Health Administration (OSHA) regulations and guidelines.
- 40 Required Demonstrate appropriate hand-hygiene techniques.
- 41 Required Explain how to clean instruments and supplies.
- 42 Required Demonstrate isolation procedures to include PPE as it applies to CDC regulations on disease processes.
- 43 Required Demonstrate the handling and disposal of contaminated material.
- 44 Required Demonstrate surgical aseptic techniques.

Enduring Understandings	Essential Questions	
Students will understand that U1 Pathogens can be transmitted in different ways	Students will keep considering Q1 What makes CRE so difficult to treat?	
U2 There are antibiotic resistant pathogens	Q2 How can someone protect themselves from various pathogens?	
U3 Hand washing is important to reducing pathogen transmission	Q3 How do you know if supplies are sterile?	
U4 Some items are disposed of while others are sterilized	Q4 What are the environmental concerns of medical waste?	
Knowledge	Skills	
Students will know	The student will be able to	
K1 There are standards to properly wash your hands	S1 Identify the transmissions methods of pathogens	
K2 The purpose of PPE	S2 Identify the elements to properly washing your hands	
K3 How to properly store equipment & supplies	S3 Explain how to clean and disinfect equipment	
K4 The various categories of PPE	S4 Identify the CDC specific categories for PPE	
K5 The difference between cleaning, disinfecting and sterilizing	S5 List the procedures of how to dispose of contaminated material	
Key vocabulary: OSHA, bloodborne pathogens, airborne pathogens, healthcare associated infections, immunizations, PPE, CDC, sterilize, disinfect, aseptic		

	Stage 3 – Evidence		
Performance Assessment Tasks		Other Evidence	
P1	Demonstrate proper hand washing technique that includes the key	01	Compare & contrast cleaning, disinfecting, and sterilization
	elements	O2	Follow and demonstrate disposal procedures

- **P2** Demonstrate putting on and taking off gown, mask, and gloves in the correct order
- **P3** Demonstrate how to create a sterile surgical environment from gloves and gown to instruments

Stage 4 - Learning Plan

Recommended Learning Experiences

Key aspects to be considered during the planning process include activating prior knowledge, introducing and reinforcing key vocabulary, addressing student misconceptions, and providing opportunities throughout all learning experiences for students to share and actively listen to ideas and strategies in pairs, small groups, and whole group discussions.

Background Knowledge: Access and build background knowledge throughout the unit. English Learners and students with disabilities may require additional supports to access and build background knowledge such as professional expert speakers, connections to experiences, peer support, technology-based resources, visuals, and collaborative dialogues.

Key Vocabulary: Introduce, support, and reinforce key vocabulary, as needed by the various learning activities and performance tasks. Students need to recognize and use the vocabulary terms, when listening, reading, speaking, and writing in the context of the learning activities and tasks. Tools for developing vocabulary are available in the **Additional Supporting Resources** section below. Students will participate in interactive "hands on" practical exercises.

- L1 Introduce infection processes
- L2 Identify procedures to protect from infection
- L3 Demonstrate procedures of keeping a sterile field and instruments
- L4 Demonstrate waste removal of contaminated material

Scaffolding Suggestions for English Language Learners and Students with Disabilities

Differentiation for students struggling with CTE should be included as part of planning for tier 1 CTE instruction. These scaffolding suggestions are intended to support teachers in planning proactively for the needs of these students within CTE lessons.

Note: While the resources listed here specifically reference either EL or special education students, they should be considered for any students who might benefit from these strategies.

- General scaffolding strategies to support ELP levels 1-5 can be found on pages 19 and 20 of <u>The GO TO Strategies: Scaffolding Options</u> for <u>Teachers of English Language Learners</u>, K-12.
- Examples of <u>sensory</u>, <u>graphic</u>, <u>and/or interactive supports</u> The use of these supports in activities and projects helps promote the development of students' academic language proficiency.
- <u>Matrix for Language Acquisition</u>: This resource Bloom's leveled verbs, Students Cans, and Teacher should for each level of language acquisition from Pre-Production (Level 1) through Advance Fluency (Level 5).
- Utilize Language Lab at the school for ELs.
- Using Teachers Aid to assist in learning for disabilities.

Enrichment and Extension Suggestions for Gifted or High-Achieving CTE students

Differentiation for students who exhibit a high level of understanding of the CTE content in any given unit should be considered as part of the planning for Tier 1 instruction. The suggestions below provide some support for teachers looking to challenge these learners.

Note: Teachers should review and provide differentiation strategies in most lessons. Choose from those suggested in the Peer-Reviewed Resources below. In most cases, these students can and should work on the same content as their peers at a level that goes deeper than may be the case for other students.

- The PWCS Gifted Education Department has many resources available to support gifted students on its web page. Some of these suggestions would make great stations or independent tasks.
- <u>Meeting the Needs of Gifted Students</u>: Differentiating CTE Instruction See pages 16-17 for a section titled "Strategies for Teaching Gifted Students in an Inclusive Classroom."

Peer-Reviewed Instructional Resources

Note: This list of resources is intended to provide support for teachers in planning their CTE instruction.

Teachers should use their professional judgment to select lessons that fully address the Student Competencies and the needs of their students.

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- International Journal of Mental Health Nursing
- Journal of Nursing Management
- Intensive & Critical Care Nursing
- Nursing Outlook
- Worldviews on Evidence-Based Nursing
- Journal of Clinical Nursing

Additional Supporting Resources

The following resources are available on EL Program **Staff Communities page**.

Scaffolding tools

- Provide visual and real-life objects to model content vocabulary.
- Provide visual, auditory, and kinesthetic strategies to engage all learners in the lesson content.
- Repeat and review processes and project expectations in various ways such as teacher modeling, student modeling, videos, charts, visual examples.

Academic Literacy Tools

(Vocabulary, graphic organizers, K-2 literacy, 3-12 reading, 3-12 writing)

- Provide partner and small group opportunities to use content vocabulary orally, visually in artwork, and in writing in descriptive lists, sentence completions and short phrases to defend artistic choices.
- Sketchbook journals, graphic organizers and thinking maps, word walls, table tents, handouts, worksheets, textbooks

Differentiation Tools

(Cooperative learning, co-teaching)

- Provide a variety of strategies to include content vocabulary: descriptive lists, illustrations, expressions, short phrases, sentence stems
- Modify project steps and materials (student choice of media (traditional and/or contemporary)
- Modify project timeline
- Modify rubric criteria
- Proximal seating
- Partner and small group activities
- Open-ended project expectations

PWCS Offices of Student Learning and English Learner (EL) Programs and Services 07.10.15

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Unit 2: Mastering Nursing Competencies and Skills in the Clinical Setting

Unit Focus

The focus of this unit is on demonstrating skills, measuring, and recording vital statistics. Students are demonstrating proficiencies in admitting clients, measuring their vital signs, and assisting with personal hygiene, moving/assisting with movement as well as assessing feeding needs and maintaining those needs. Students are learning the legal requirements/protections that exist while working with mobility equipment while a client is in a clinical setting.

Duration: 3-4 weeks

Stage 1 – Profile of a Graduate

Develops the behaviors, knowledge, and skills to graduate with the following qualities:

Critical Thinker

Achieves and applies appropriate academic and technical knowledge.

Uses critical reading skills to analyze, interpret, and evaluate.

Demonstrates productive workplace skills, qualities, and behaviors.

Global Collaborator

Engages in constructive dialogue and debate of local, national, and global issues

Stage 2 - Desired Outcomes

Virginia Competencies

- Required Demonstrate assessment procedures as outlined in the Virginia Board of Nursing Regulations in a lab and/or clinical setting.
- 46 Required Demonstrate measuring and recording intake and output in a lab and/or clinical setting.
- 47 Required Demonstrate alternate feeding methods and techniques in a lab and/or clinical setting.
- 48 Required Demonstrate appropriate body mechanics in a lab and/or clinical setting.

- 49 Required Explain procedures and law regarding use of mobility equipment in a lab and/or clinical setting.
- 50 Required Maintain a safe and controlled environment within lab and clinical environments.
- Required Identify prevention of, and appropriate response to, situations of intimate partner and family violence within lab and clinical environments.
- Required Perform procedures related to American Heart Association (AHA) first aid and emergency care in a lab and/or clinical setting.
- Required Identify environmental safety precautions and procedures within lab and clinical environments.
- Required Demonstrate range of motion in a lab and/or clinical setting.
- Required Explain the admission, transfer, and discharge procedures of a clinical setting.
- Required Perform procedures related to personal hygiene and activities of daily living (ADL).

Enduring Understandings	Essential Questions		
Students will understand that U1 Measurements need to be recorded U2 Clients will have individual feeding needs U3 Posture and body mechanics are important for a nurse's safety U4 There are legal protections U5 Controlling the client's environment benefits the client as well as the nurse U6 What it means to be a mandated reporter U7 Clients often need assistance in daily hygiene maintenance	 Students will keep considering Q1 What are the appropriate steps to measuring vital signs based on the patient's needs? Q2 What fluids are best for intake? Q3 What feeding options are available in each scenario? Q4 What is the best/safest way to lift or move a weighted object? Q5 When/How are restraints selected? Q6 What are the expectations of a mandated reporter? Q7 What is a bystander expected to do in an emergency? 		
Knowledge	Skills		
Students will know	The student will be able to		
K1 The vital signs necessary for each client	S1 Measure each vital sign for a client		
K2 Fluids necessary for intake/output	S2 Identify fluids considered as intake vs. output		
K3 The conversion between the metric system & USCS			

Prince William County Schools

Career and Technical Education

Subject

K4	The appropriate way to sit, stand, move, and lift objects	S3	Assess a client's feeding needs, prepare a client for feeding, feed the client, and record the feeding
K5 K6	How to use mechanical lifts How to control noise & climate while maintaining dignity of the client	S4 S5	Lift heavy objects (or clients) safely and appropriately Explain the legal protections of moving a client
K7 K8	How to perform basic first aid How to perform CPR	S6	Design an environment to control climate and noise while protecting the dignity of the client
К9	Performing or assisting a client with personal hygiene vocabulary: vital sign, intake, output, USCS, SPHM, NIOSH, first aid,	S7 S8	Report suspected abuse of a client Perform first aid in a given situation
mar	ndated reporter, CPR, AHA Basic Life Support, Emergency Medical atment and Active Labor Act,	S9 S10	Perform CPR on a client in respiratory distress Admit, transfer, and discharge a client
		S11	Show how to administer one of the types of baths

	Stage 3 – Evidence			
Performance Assessment Tasks		Other Evidence		
P1	Demonstrate proper body mechanics/ergonomics	01	Compare and contrast fluid intake vs. output	
P2	Maintain reasonable client comfort and dignity throughout length of care	O2 O3	Compare and contrast proper vs. improper body mechanics Documenting signs of abuse	

Stage 4 - Learning Plan

Recommended Learning Experiences

Key aspects to be considered during the planning process include activating prior knowledge, introducing and reinforcing key vocabulary, addressing student misconceptions, and providing opportunities throughout all learning experiences for students to share and actively listen to ideas and strategies in pairs, small groups, and whole group discussions.

Background Knowledge: Access and build background knowledge throughout the unit. English Learners and students with disabilities may require additional supports to access and build background knowledge such as professional expert speakers, connections to experiences, peer support, technology-based resources, visuals, and collaborative dialogues.

Key Vocabulary: Introduce, support, and reinforce key vocabulary, as needed by the various learning activities and performance tasks. Students need to recognize and use the vocabulary terms, when listening, reading, speaking, and writing in the context of the learning activities and tasks. Tools for developing vocabulary are available in the **Additional Supporting Resources** section below. Students will participate in interactive "hands on" practical exercises.

- L1 Admitting a client and measuring vitals for a client
- L2 Caring for a client, including moving them and assisting with personal hygiene.
- L3 Discharging a client

Scaffolding Suggestions for English Language Learners and Students with Disabilities

Differentiation for students struggling with CTE should be included as part of planning for tier 1 CTE instruction. These scaffolding suggestions are intended to support teachers in planning proactively for the needs of these students within CTE lessons.

Note: While the resources listed here specifically reference either EL or special education students, they should be considered for any students who might benefit from these strategies.

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Enrichment and Extension Suggestions for Gifted or High-Achieving CTE students

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Additional Supporting Resources

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Scaffolding tools

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- Provide visual, auditory, and kinesthetic strategies to engage all learners in the lesson content.

Academic Literacy Tools

(Vocabulary, graphic organizers, K-2 literacy, 3-12 reading, 3-12 writing)

 Provide partner and small group opportunities to use content vocabulary orally, visually in artwork, and in writing in descriptive lists, sentence completions and short phrases to defend artistic choices.

Differentiation Tools

(Cooperative learning, co-teaching)

Provide a variety of strategies to include content vocabulary: descriptive lists, illustrations, expressions, short phrases, sentence stems

Prince William County Schools

Career and Technical Education

Subject

- Repeat and review processes and project expectations in various ways such as teacher modeling, student modeling, videos, charts, visual examples.
- Sketchbook journals, graphic organizers and thinking maps, word walls, table tents, handouts, worksheets, textbooks
- Modify project steps and materials (student choice of media (traditional and/or contemporary)
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- Modify rubric criteria
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PWCS Offices of Student Learning and English Learner (EL) Programs and Services 07.10.15

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Unit 3: Understanding Fluid and Electrolyte Balances

Unit Focus

This short unit focuses on the effect of fluids, homeostasis, and IV therapies. First, students are understanding how fluids affect the body and its homeostasis. Next, they examine the types of imbalances. Finally, they examine the IV therapies available to counter some of these imbalances.

Duration: 1 week

Stage 1 – Profile of a Graduate

Develops the behaviors, knowledge, and skills to graduate with the following qualities:

Critical Thinker

Achieves and applies appropriate academic and technical knowledge.

Uses critical reading skills to analyze, interpret, and evaluate.

Demonstrates productive workplace skills, qualities, and behaviors.

Global Collaborator

Engages in constructive dialogue and debate of local, national, and global issues

Stage 2 - Desired Outcomes

Virginia Competencies

57	Required	Explain the rol	e of fluids in	ı maintaining l	homeostasis.
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- Required Describe the major types of acid-base imbalances.
- 59 Required Describe the principles of intravenous (IV) therapy.

Enduring Understandings	Essential Questions
Students will understand that	Students will keep considering

Career and Technical Education

U1 Bodies are constantly adjusting in response to changes outside and inside the body	Q1 What nursing interventions are indicated for each type of fluid-volume imbalance?
U2 Fluids affect homeostasis in the body	Q2 How can you counter IV complications?
Knowledge	Skills
K1 The normal pH in the human body K2 The importance of fluid intake & output K3 The causes of acid-base imbalance Key vocabulary: homeostasis, intake, output, intracellular, extracellular, antidiuretic hormone (ADH), aldosterone, reninangiotensin, hypertonic, hypotonic, isotonic solutions, respiratory acidosis, respiratory alkalosis, metabolic acidosis, metabolic alkalosis, tonicity, solute, isotonic, hypotonic, hypertonic,	 The student will be able to S1 Explain the common causes, signs, and symptoms of: respiratory acidosis, respiratory alkalosis, metabolic acidosis, metabolic alkalosis S2 List types of IV therapy S3 List types of devices for IV therapy S4 Describe how to maintain an IV

	Stage 3 – Evidence			
Performance Assessment Tasks		Other Evidence		
P1	Demonstrate knowledge in acid-base balancing	01	Compare and contrast fluid intake vs. output	
P2	Identify differences between respiratory/metabolic alkalosis/acidosis	02	Compare and contrast metabolic and respiratory alkalosis and acidosis	

Stage 4 - Learning Plan

Recommended Learning Experiences

Key aspects to be considered during the planning process include activating prior knowledge, introducing and reinforcing key vocabulary, addressing student misconceptions, and providing opportunities throughout all learning experiences for students to share and actively listen to ideas and strategies in pairs, small groups, and whole group discussions.

Prince William County Schools

Career and Technical Education

Subject

Background Knowledge: Access and build background knowledge throughout the unit. English Learners and students with disabilities may require additional supports to access and build background knowledge such as professional expert speakers, connections to experiences, peer support, technology-based resources, visuals, and collaborative dialogues.

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L1 Describe the role of fluids in the body and homeostasis

L2 IV therapies as a role to imbalances

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Scaffolding tools

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Academic Literacy Tools

(Vocabulary, graphic organizers, K-2 literacy, 3-12 reading, 3-12 writing)

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Differentiation Tools

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- Modify project steps and materials (student choice of media (traditional and/or contemporary)
- Modify project timeline

Prince William County Schools	Career and Technical Education	Subject
		 Modify rubric criteria Proximal seating Partner and small group activities Open-ended project expectations

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Unit 4: Applying Concepts Related to Wellness and Illness

Unit Focus

The unit focus is on the nurse's role in identifying disease and treatment. The nurse's role includes understanding the microorganisms that cause illness, the diagnostic procedures to diagnose the illness, and the treatment of the illness. The treatment includes various therapies as well as the nursing role of calming the client's anxieties, performing pre-, intra-, and post-surgical responsibilities.

Duration: 2-3 weeks

Stage 1 – Profile of a Graduate

Develops the behaviors, knowledge, and skills to graduate with the following qualities:

Critical Thinker

Achieves and applies appropriate academic and technical knowledge.

Uses critical reading skills to analyze, interpret, and evaluate.

Demonstrates productive workplace skills, qualities, and behaviors.

Global Collaborator

Engages in constructive dialogue and debate of local, national, and global issues

Stage 2 - Desired Outcomes

Virginia Competencies

- Required Explain physiological and psychosocial aspects of the illness and disease process.
- Required Demonstrate a head-to-toe assessment.
- Required Identify common diagnostic procedures.
- 63 Required Identify common treatment modalities.
- Required Apply the nursing process as it relates to the surgical client.

Required Apply the nursing process to a client with neoplastic disease (i.e., cancer). Required Apply the nursing process to a client with an immune disorder.			
Enduring Understandings	Essential Questions		
Students will understand that U1 Illness can be classified by microorganism.	Students will keep considering Q1 What are the signs/symptoms of a given disease?		
U2 There are several different types of treatment modalities	Q2 What is the best way to assess a given body system based on the client's needs?		
	Q3 What is a nurse's role in treatment modalities?		
	Q4 How can a family be supported during a client's treatment?		
Knowledge	Skills		
Students will know	The student will be able to		
K1 The classifications of diseases	S1 Explain common symptoms of a given disease		
K2 The composition of each body system	S2 Explain psychosocial effects		
K3 Strategies for dealing with client anxieties	S3 Assess each body system of a client		
K4 Nursing procedures for surgical, neoplastic, and	S4 Identify the proper treatment modalities for a given illness		
immunocompromised clients	S5 Follow a pre- and post-surgical checklist for a client in a lab or clinical setting		
Key vocabulary: physiological, psychosocial, neoplastic disease, infectious disease, hereditary disease, traumatic disease, congenital diseases, chronic, acute, exacerbation, remission, terminal, community acquired, nosocomial illnesses, X-Ray, CT, MRI, biopsy, EKG, EMG, EEG, treatment modalities, intraoperative, postoperative	S6 Assess outcomes, interventions, and evaluations associated with neoplastic disease and immune disorder		

Stage 3 –	Evidence
Performance Assessment Tasks	Other Evidence

P1 Identify an illness based on a given set of symptoms
P2 Discuss and explain the function of a client history
O3 Perform an assessment of each body system for a client
O6 Perform pre- and post-surgical duties including: calming client
O7 anxieties, performing presurgical procedures, and completing
O7 intraoperative and postoperative responsibilities

Stage 4 - Learning Plan

Recommended Learning Experiences

Key aspects to be considered during the planning process include activating prior knowledge, introducing and reinforcing key vocabulary, addressing student misconceptions, and providing opportunities throughout all learning experiences for students to share and actively listen to ideas and strategies in pairs, small groups, and whole group discussions.

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- L1 Describe assessment of each body system as a way to diagnosis
- L2 Explain various and necessary therapies
- L3 Perform nursing duties for surgery before, during, and after surgery

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Academic Literacy Tools

(Vocabulary, graphic organizers, K-2 literacy, 3-12 reading, 3-12 writing)

- Provide partner and small group opportunities to use content vocabulary orally, visually in artwork, and in writing in descriptive lists, sentence completions and short phrases to defend artistic choices.
- Sketchbook journals, graphic organizers and thinking maps, word walls, table tents, handouts, worksheets, textbooks

Differentiation Tools

(Cooperative learning, co-teaching)

- Provide a variety of strategies to include content vocabulary: descriptive lists, illustrations, expressions, short phrases, sentence stems
- Modify project steps and materials (student choice of media (traditional and/or contemporary)
- Modify project timeline
- Modify rubric criteria
- Proximal seating
- Partner and small group activities
- Open-ended project expectations

PWCS Offices of Student Learning and English Learner (EL) Programs and Services 07.10.15

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Resource: PWCS Standards-Based Instructional Planning Process 08.05.11.

Unit 5: Understanding Principles of Growth and Development

Unit Focus

The unit focus is on the various stages of development. This means identifying key characteristics at each stage of being an infant, toddler, preschooler, school-age, adolescent, young adult, middle adult, and older adult.

Duration: 4 weeks

Stage 1 - Profile of a Graduate

Develops the behaviors, knowledge, and skills to graduate with the following qualities:

Critical Thinker

Achieves and applies appropriate academic and technical knowledge.

Uses critical reading skills to analyze, interpret, and evaluate.

Demonstrates productive workplace skills, qualities, and behaviors.

Global Collaborator

Engages in constructive dialogue and debate of local, national, and global issues

Stage 2 - Desired Outcomes

Virginia Competencies

- 67 Required Identify global health influences on growth and development across the lifespan.
- 68 Required Examine principles of growth and development across the lifespan.
- 69 Required Summarize theories of growth and development across the lifespan.
 Required Describe the influences of heredity and environment on growth and development
- 70 across the lifespan.
- 71 Required Explain growth and development of the infant.

72 Required Explain growth and development of the toddler.	
73 Required Explain growth and development of the preschooler.	
74 Required Explain growth and development of the school-age child.	
75 Required Explain growth and development of the adolescent.	
76 Required Explain growth and development of the young adult.	
77 Required Explain growth and development of the middle adult.	
78 Required Explain growth and development of the older adult.	
Enduring Understandings	Essential Questions
Students will understand that	Students will keep considering
U1 Lifespan varies on a global scale	Q1 What major events have affected human lifespan?
U2 Lifespan is affected by environmental factors as well as genetic	Q2 How does genetics affect development and lifespan?
factors	Q3 How do ethnic factors affect development and lifespan?
U3 Growth and development at each life stage is based on a number of factors	Q4 How does ordinal position affect development?
Knowledge	Skills
Knowledge Students will know	Skills The student will be able to
, and the second	
Students will know	The student will be able to
Students will know K1 The stages of development K2 Key theories of development K3 The influences of heredity and environment on growth and	The student will be able to S1 Describe characteristics at each life stage
Students will know K1 The stages of development K2 Key theories of development	The student will be able to S1 Describe characteristics at each life stage S2 Explain's theory of development (each of the 7 key theories)
Students will know K1 The stages of development K2 Key theories of development K3 The influences of heredity and environment on growth and	The student will be able to S1 Describe characteristics at each life stage S2 Explain's theory of development (each of the 7 key theories) S3 List hereditary factors on lifespan

	Stage 3 – Evidence			
Performance Assessment Tasks		Other Evidence		
P1	List and discuss the hereditary factors that affect development	01	Compare and contrast theories of development	
P2	List and discuss the environmental factors that affect development	02	Explain's theory of development (each of the 7 key theories)	
Р3	Create age appropriate activities and identify developmentally appropriate communication and care methods	О3	Describe the elements of growth and development for each stage (infant, toddler, preschooler, school-age, adolescent, young adult, middle adult, older adult)	

Stage 4 - Learning Plan

Recommended Learning Experiences

Key aspects to be considered during the planning process include activating prior knowledge, introducing and reinforcing key vocabulary, addressing student misconceptions, and providing opportunities throughout all learning experiences for students to share and actively listen to ideas and strategies in pairs, small groups, and whole group discussions.

Background Knowledge: Access and build background knowledge throughout the unit. English Learners and students with disabilities may require additional supports to access and build background knowledge such as professional expert speakers, connections to experiences, peer support, technology-based resources, visuals, and collaborative dialogues.

Key Vocabulary: Introduce, support, and reinforce key vocabulary, as needed by the various learning activities and performance tasks. Students need to recognize and use the vocabulary terms, when listening, reading, speaking, and writing in the context of the learning activities and tasks. Tools for developing vocabulary are available in the **Additional Supporting Resources** section below. Students will participate in interactive "hands on" practical exercises.

- L1 Describe factors that affect growth, development, and lifespan
- L2 Describe each stage of development

Scaffolding Suggestions for English Language Learners and Students with Disabilities

Differentiation for students struggling with CTE should be included as part of planning for tier 1 CTE instruction. These scaffolding suggestions are intended to support teachers in planning proactively for the needs of these students within CTE lessons.

Note: While the resources listed here specifically reference either EL or special education students, they should be considered for any students who might benefit from these strategies.

- General scaffolding strategies to support ELP levels 1-5 can be found on pages **19** and **20** of <u>The GO TO Strategies: Scaffolding Options for</u> Teachers of English Language Learners, K-12.
- Examples of <u>sensory</u>, <u>graphic</u>, <u>and/or interactive supports</u> The use of these supports in activities and projects helps promote the development of students' academic language proficiency.
- <u>Matrix for Language Acquisition</u>: This resource Bloom's leveled verbs, Students Cans, and Teacher should for each level of language acquisition from Pre-Production (Level 1) through Advance Fluency (Level 5).
- Utilize Language Lab at the school for ELs.
- Using Teachers Aid to assist in learning for disabilities.

Enrichment and Extension Suggestions for Gifted or High-Achieving CTE students

Differentiation for students who exhibit a high level of understanding of the CTE content in any given unit should be considered as part of the planning for Tier 1 instruction. The suggestions below provide some support for teachers looking to challenge these learners.

Note: Teachers should review and provide differentiation strategies in most lessons. Choose from those suggested in the Peer-Reviewed Resources below. In most cases, these students can and should work on the same content as their peers at a level that goes deeper than may be the case for other students.

- The PWCS Gifted Education Department has many resources available to support gifted students on its web page. Some of these suggestions would make great stations or independent tasks.
- <u>Meeting the Needs of Gifted Students</u>: Differentiating CTE Instruction See pages 16-17 for a section titled "Strategies for Teaching Gifted Students in an Inclusive Classroom."

Peer-Reviewed Instructional Resources

Note: This list of resources is intended to provide support for teachers in planning their CTE instruction.

Teachers should use their professional judgment to select lessons that fully address the Student Competencies and the needs of their students.

- International Journal of Nursing Studies
- International Journal of Mental Health Nursing

- Journal of Nursing Management
- Intensive & Critical Care Nursing
- Nursing Outlook
- Worldviews on Evidence-Based Nursing
- Journal of Clinical Nursing

Additional Supporting Resources

The following resources are available on EL Program Staff Communities page.

Scaffolding tools

- Provide visual and real-life objects to model content vocabulary.
- Provide visual, auditory, and kinesthetic strategies to engage all learners in the lesson content.
- Repeat and review processes and project expectations in various ways such as teacher modeling, student modeling, videos, charts, visual examples.

Academic Literacy Tools

(Vocabulary, graphic organizers, K-2 literacy, 3-12 reading, 3-12 writing)

- Provide partner and small group opportunities to use content vocabulary orally, visually in artwork, and in writing in descriptive lists, sentence completions and short phrases to defend artistic choices.
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Differentiation Tools

(Cooperative learning, co-teaching)

- Provide a variety of strategies to include content vocabulary: descriptive lists, illustrations, expressions, short phrases, sentence stems
- Modify project steps and materials (student choice of media (traditional and/or contemporary)
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Resource: Unit Planner adapted from VPRojas, Strategies for Success with ELL: An ASCD Action Toolkit, 2007;

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Unit 6: Understanding Concepts of Grief, Death, and Dying

Unit Focus

The unit focus is on the death and dying stages of life and the nurse's role during these stages. Nurses need to understand the stages of death and dying, the signs of approaching death, their post-mortem responsibilities while using strategies to keep clients and families calm.

Duration: 2-3 weeks

Stage 1 - Profile of a Graduate

Develops the behaviors, knowledge, and skills to graduate with the following qualities:

Critical Thinker

Achieves and applies appropriate academic and technical knowledge.

Uses critical reading skills to analyze, interpret, and evaluate.

Demonstrates productive workplace skills, qualities, and behaviors.

Global Collaborator

Engages in constructive dialogue and debate of local, national, and global issues

Stage 2 - Desired Outcomes

Virginia Competencies

- 79 Required Describe the stages of death and dying.
- 80 Required Identify the major fears of the dying client.
- 81 Required Identify signs and symptoms of approaching death.
- 82 Required Describe the grieving process.
- 83 Required Identify a nurse's responsibilities associated with the death of a client.
- 84 Required Apply the nursing process for a client with palliative care needs.

Enduring Understandings	Essential Questions		
 Students will understand that U1 Personal beliefs can affect a client's fear in death & dying stage of life U2 A client may feel lonely and scared during the death & dying stage U3 Various cultures will view death and observe the grieving process differently U4 Death with dignity 	 Students will keep considering Q1 How do religious/spiritual beliefs affect a client's view of death & dying? Q2 How can nurses provide comfort for the client and family during death & dying stage? Q3 What are the stages of grief for the client as well as for family? 		
Knowledge	Skills		
Students will know	The student will be able to		
K1 Theories of death & dying	S1 Explain the theories of death & dying		
K2 Methods to calm a client's fear during death & dying stage	S2 Describe characteristics of each stage of death		
K3 The signs & symptoms of death	S3 List strategies/methods to calm fear, loneliness, and		
K4 The stages of grief	abandonment.		
K5 How to handle advance directives	S4 List physical signs of approaching death		
K6 Palliative vs. hospice care	S5 Explain the nurse's role in a post-mortem situation.		
Key vocabulary: Kübler-Ross theory of death, clinical death, brain death, palliative care, DNR, DNAR, DNI, AHCD, dying with dignity	S6 Demonstrate hospice and palliative care tactics		

	Stage 3 – Evidence		
Performance Assessment Tasks		Other Evidence	
P:	Discuss and present the various theories of death & dying	01	Compare and contrast hospice and palliative care
P	Perform palliative and hospice care to clients and families	02	Demonstrate hospice and palliative care for a client

Stage 4 - Learning Plan

Recommended Learning Experiences

Key aspects to be considered during the planning process include activating prior knowledge, introducing and reinforcing key vocabulary, addressing student misconceptions, and providing opportunities throughout all learning experiences for students to share and actively listen to ideas and strategies in pairs, small groups, and whole group discussions.

Background Knowledge: Access and build background knowledge throughout the unit. English Learners and students with disabilities may require additional supports to access and build background knowledge such as professional expert speakers, connections to experiences, peer support, technology-based resources, visuals, and collaborative dialogues.

Key Vocabulary: Introduce, support, and reinforce key vocabulary, as needed by the various learning activities and performance tasks. Students need to recognize and use the vocabulary terms, when listening, reading, speaking, and writing in the context of the learning activities and tasks. Tools for developing vocabulary are available in the **Additional Supporting Resources** section below. Students will participate in interactive "hands on" practical exercises.

- L1 Discuss the stages of death & dying
- L2 Provide comfort and calm fears during each stage
- L3 Demonstrate palliative care needs

Scaffolding Suggestions for English Language Learners and Students with Disabilities

Differentiation for students struggling with CTE should be included as part of planning for tier 1 CTE instruction. These scaffolding suggestions are intended to support teachers in planning proactively for the needs of these students within CTE lessons.

Note: While the resources listed here specifically reference either EL or special education students, they should be considered for any students who might benefit from these strategies.

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- Examples of <u>sensory</u>, <u>graphic</u>, <u>and/or interactive supports</u> The use of these supports in activities and projects helps promote the development of students' academic language proficiency.

- <u>Matrix for Language Acquisition</u>: This resource Bloom's leveled verbs, Students Cans, and Teacher should for each level of language acquisition from Pre-Production (Level 1) through Advance Fluency (Level 5).
- Utilize Language Lab at the school for ELs.
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Enrichment and Extension Suggestions for Gifted or High-Achieving CTE students

Differentiation for students who exhibit a high level of understanding of the CTE content in any given unit should be considered as part of the planning for Tier 1 instruction. The suggestions below provide some support for teachers looking to challenge these learners.

Note: Teachers should review and provide differentiation strategies in most lessons. Choose from those suggested in the Peer-Reviewed Resources below. In most cases, these students can and should work on the same content as their peers at a level that goes deeper than may be the case for other students.

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- <u>Meeting the Needs of Gifted Students</u>: Differentiating CTE Instruction See pages 16-17 for a section titled "Strategies for Teaching Gifted Students in an Inclusive Classroom."

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Teachers should use their professional judgment to select lessons that fully address the Student Competencies and the needs of their students.

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- Journal of Nursing Management
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- Worldviews on Evidence-Based Nursing
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Additional Supporting Resources					
	The following resources are available on EL Program Staff Communities page.				
	Scaffolding tools	Academic Literacy Tools	Differentiation Tools		
•	Provide visual and real-life objects to	(Vocabulary, graphic organizers, K-2 literacy,	(Cooperative learning, co-teaching)		
	model content vocabulary.	3-12 reading, 3-12 writing)			

Prince William County Schools

Career and Technical Education

Subject

- Provide visual, auditory, and kinesthetic strategies to engage all learners in the lesson content.
- Repeat and review processes and project expectations in various ways such as teacher modeling, student modeling, videos, charts, visual examples.
- Provide partner and small group opportunities to use content vocabulary orally, visually in artwork, and in writing in descriptive lists, sentence completions and short phrases to defend artistic choices.
- Sketchbook journals, graphic organizers and thinking maps, word walls, table tents, handouts, worksheets, textbooks
- Provide a variety of strategies to include content vocabulary: descriptive lists, illustrations, expressions, short phrases, sentence stems
- Modify project steps and materials (student choice of media (traditional and/or contemporary)
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Resource: PWCS Standards-Based Instructional Planning Process 08.05.11.

Unit 7: Introducing Concepts of Medication Administration

Unit Focus

The unit focus is on drug administration. Students identify key principles of medication administration including the drug (chemical) to be administered, the legal and ethical issues of using the drug, using conversion and math skills to calculate the exact dosage, and appropriately recording the time, frequency, and dosage.

Duration: 2-3 weeks

Stage 1 - Profile of a Graduate

Develops the behaviors, knowledge, and skills to graduate with the following qualities:

Critical Thinker

Achieves and applies appropriate academic and technical knowledge.

Uses critical reading skills to analyze, interpret, and evaluate.

Demonstrates productive workplace skills, qualities, and behaviors.

Global Collaborator

Engages in constructive dialogue and debate of local, national, and global issues

Stage 2 - Desired Outcomes

Virginia Competencies

- 85 Required Identify general principles of pharmacology.
- 86 Required Identify principles of pharmacodynamics and pharmacokinetics.
- 87 Required Explain the principles of medication administration.
- 88 Required Calculate medication dosages.

Enduring Understandings	Essential Questions		
 Students will understand that U1 Different forms of drugs are available for different scenarios U2 Drugs affect the body based on dosage, interactions, etc. U3 There are rules and responsibilities in medication administration U4 Math skills, conversions, and ratios are needed for calculating medication dosages 	 Students will keep considering Q1 What are the ethical responsibilities of a nurse in drug administration? Q2 What factors affect the absorption and distribution of drugs in the body? Q3 How does technology affect medication administration? 		
Knowledge	Skills		
 K1 Legal standards and agencies of pharmacology K2 Factors that affect drug effectiveness K3 Disposal of medication and safety procedures K4 The proper equipment necessary for medication administration K5 Conversions necessary to calculate medication dosages Key vocabulary: pharmacology, pharmacodynamics, pharmacokinetics, USDA, CSA, USP, Patient's Bill of Rights, 	 The student will be able to S1 Identify drug reference books/online resources S2 Identify chemical, generic, and brand names S3 Identify factors affecting drug absorption and effectiveness. S4 Calculate medication dosage and the appropriate abbreviations used to record administration 		

Stage 3 – Evidence			
Performance Assessment Tasks		Other Evidence	
P1	Research & present the key agencies in medication administration	01	Calculate medication dosage based on a client's profile and needs
	(FDA, USP, CSA, etc)	02	Create a list of drug references and resources
P2	Compare and contrast pharmacodynamics and pharmacokinetics	03	Explain the pharmacodynamics and pharmacokinetics of a given
Р3	Safely and accurately administer medication via various routes		medication for a client

Stage 4 - Learning Plan

Recommended Learning Experiences

Key aspects to be considered during the planning process include activating prior knowledge, introducing and reinforcing key vocabulary, addressing student misconceptions, and providing opportunities throughout all learning experiences for students to share and actively listen to ideas and strategies in pairs, small groups, and whole group discussions.

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- L1 Identify pharmacodynamics and pharmacokinetics of drugs
- L2 Calculate the proper dosage based on given factors including pharmacodynamics and pharmacokinetics
- L3 Discuss the qualitative principles of medication administration including Patient's Bill of Rights, safety, drug agencies, etc.

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	model content vocabulary.	3-12 reading, 3-12 writing)	•	Provide a variety of strategies to include		
				content vocabulary: descriptive lists,		

Prince William County Schools

Career and Technical Education

Subject

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