C: Nursing Knowledge

Major Competency Area: C

Nursing Knowledge

Competency: C-1

Anatomy and Physiology

Date: January 16, 2017

- C-1-1 Identify the structures and functions of the body.
- C-1-2 Describe the anatomical organization of the body.
- C-1-3 Describe the cellular chemistry and organization of the body.
- C-1-4 Describe cellular functions: protein synthesis, cell division and movement of substances across the cell membrane.
- C-1-5 Explain how cells are organized into tissue, organs and systems of the body.
- C-1-6 Identify the structure and explain the function of body systems:
 - cardiovascular system
 - circulatory system
 - digestive system
 - endocrine system
 - genitourinary system
 - immune system
 - integumentary system
 - lymphatic system
 - musculoskeletal system
 - nervous system and special senses
 - reproductive system
 - respiratory system
- C-1-7 Identify the components of blood and blood products.
- C-1-8 Describe the major body processes of:
 - homeostasis
 - metabolism
 - reproduction

Competency: C-2

Microbiology

Date: January 16, 2017

- C-2-1 Explain characteristics of micro-organisms and their role in the transmission of disease.
 C-2-2 Describe and differentiate pathogens and non-pathogens.
 C-2-3 Describe and differentiate bacteria, viruses and fungi.
- C-2-4 Describe the normal micro-organisms within the human body.
- C-2-5 Describe conditions for growth and transferability of micro-organisms.
- C-2-6 Explain the concept of asepsis.
- C-2-7 Explain the principles of disease prevention and health promotion.
- C-2-8 Describe the concept of infection prevention and control.
- C-2-9 Explain the relationship between microbiology as it relates to pharmacology.

Competency: C-3

Pathophysiology

Date: January 16, 2017

- C-3-1 Define pathophysiology as the science of physiological and psychological disease processes within the human body.
- C-3-2 Identify and describe pathophysiological processes including:
 - acute conditions/disorders
 - chronic conditions/disorders
 - complications
 - etiology (cause of disease)
 - manifestations (signs and symptoms)
 - pathophysiology (disease process)
- C-3-3 Identify the etiology, pathophysiology and complications of common health problems for all body systems.
- C-3-4 Describe body responses to disease including:
 - carcinogenesis
 - cellular/tissue/organ/system level
 - genetic
 - immunity/autoimmunity
 - inflammation
 - psychological
 - stress
- C-3-5 Describe the processes of inflammation, infection and healing.
- C-3-6 Explain types of trauma such as:
 - addictions
 - burns
 - fractures
 - hemorrhage
 - mental health

Pathophysiology

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- C-3-6 Explain types of trauma such as: (cont'd)
 - multisystem failure
 - neurological
 - psychological
 - shock
 - surgical
- C-3-7 Explain common medical management in relation to pharmacology, surgery, anesthesia and treatments.
- C-3-8 Describe diagnostic tests commonly used in healthcare.

Competency: C-4

Medical Terminology

Date: January 16, 2017

- C-4-1 Identify meanings of common prefixes, suffixes and root words used in reporting and documenting.
- C-4-2 Identify employer approved abbreviations.
- C-4-3 Use appropriate medical terminology in reporting and documentation.
- C-4-4 Apply agency policy regarding use of abbreviations and medical terminology.

Competency: C-5

Growth and Development

Date: June 1, 2015

- C-5-1 Explain theories of human growth and development across the life span.
- C-5-2 Describe the stages of growth and development across the life span.
- C-5-3 Describe significant physical, psychological, social, cognitive, moral, spiritual and cultural developments across the life span.
- C-5-4 Describe how factors of environment, genetics, culture, lifestyle, religion and maturation influence growth and development.
- C-5-5 Describe the process of learning across the life span.
- C-5-6 Describe the stages of death, dying, grief and the grieving process.

Competency: C-6

Nutrition

Date: January 16, 2017

- C-6-1 Describe the importance of nutrition to health and recovery.
- C-6-2 Identify the functions, major sources and daily requirements for common nutrients including:
 - carbohydrate
 - fat
 - fiber
 - minerals
 - protein
 - vitamins
- C-6-3 Identify Canada's Food Guide and/or special dietary requirements for healthy and chronic conditions across the life span.
- C-6-4 Identify factors that affect nutrition and hydration.
- C-6-5 Identify indicators of adequate and inadequate nutrition and hydration.
- C-6-6 Describe methods to assess nutrition and hydration status including:
 - body mass index
 - diet history
 - food allergies
 - general appearance
 - height and weight
 - intake/output
 - lab values
 - perception of body image
 - skin turgor
 - socio-economic challenges
 - swallowing
 - waist circumference
- C-6-7 Describe the purpose and elements of therapeutic diets/ dietary restrictions.
- C-6-8 Identify when to consult with a dietician/nutritionist.

Major Competency Area: C

Nursing Knowledge

Competency: C-7

Pharmacology

Date: January 16, 2017

- C-7-1 Define pharmacology.
- C-7-2 Describe the process of pharmacokinetics and pharmacodynamics across the life span.
- C-7-3 Identify classifications, generic and trade names of drugs and appropriate pharmacological resources.
- C-7-4 Describe the principles of pharmacology management including:
 - assessment
 - controlled substances
 - documentation
 - policy and procedures
 - safe handling (storage, transport, disposal)
 - the rights
- C-7-5 Identify the common routes of medication administration.
- C-7-6 Recognize high/low/expected lab values related to pharmacology.
- C-7-7 Describe effects of drugs including:
 - adverse reaction
 - allergic reaction
 - body system impact
 - drug interactions
 - side effects
 - synergistic effects (additive and antagonistic).
 - therapeutic effects
- C-7-8 Describe the signs, symptoms and treatment of anaphylaxis.

Pharmacology

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C-7-9	Identify common systems of measurement in medication administration
C-7-10	Identify formulas to calculate medication dosages.
C-7-11	Differentiate between intentional and unintentional drug use and dependence.
C-7-12	Differentiate between physiological and psychological dependence.
C-7-13	Identify common drug/medication legislation and standards.
C-7-14	Identify roles and responsibilities of inter-professional team related to pharmacology.

Major Competency Area: C

Nursing Knowledge

Competency: C-8

Social Science and Humanities

Date: January 16, 2017

- C-8-1 Describe fundamentals of nursing knowledge that encompass human caring related to arts, science and humanitarianism including:
 - experiences
 - phenomena
 - processes
- C-8-2 Understand foundations of English language and literacy:
 - comprehension
 - content
 - grammar
 - mechanics
 - organization
 - rhetorical analysis
 - writing skill and style
- C-8-3 Identify effective communication strategies to engage with individuals, groups and communities:
 - interpersonal
 - professional
 - therapeutic
- C-8-4 Identify foundational concepts of personal health and wellness related to individuals, groups and communities including:
 - addictions
 - communicable disease control
 - immunization
 - mental health/stress management
 - neglect/abuse
 - nutrition/physical activity
 - population health
 - prevention/wellness
 - sexual activity/family planning
 - violence

Social Science and Humanities

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- C-8-5 Describe foundations of health and wellness of self and others across the lifespan:
 - environmental
 - psychological
 - physical
 - social
 - spiritual
- C-8-6 Describe determinants of health and impact on individual health and wellness.
- C-8-7 Understand foundations of psychology in relation to human behavior and development across the lifespan including:
 - behavior
 - cognition and intelligence
 - conditioning and learning
 - emotion and motivation
 - memory
 - perception
 - sensation
 - states of consciousness
 - stress and health
 - psychological health and illness
- C-8-8 Understand the concept of advocacy through promotion of wellness behavior and practices for:
 - individuals
 - groups
 - communities
- C-8-9 Demonstrate knowledge of foundations of sociology related to social behavior and relationships across the lifespan:
 - social
 - biological
 - emotional
 - political

Social Science and Humanities

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- C-8-9 Demonstrate knowledge of foundations of sociology related to social behavior and relationships across the lifespan: (cont'd)
 - cultural
 - cognitive
 - spiritual
- C-8-10 Demonstrate knowledge and ability to apply foundations of sociology to ethical nursing practice.

Competency: C-9

Best Practices and Research

Date: January 16, 2017

- C-9-1 Demonstrate knowledge and ability to apply critical thinking and critical inquiry in validation and application of research:
 - applicability
 - consistency of data
 - ethical, political, professional issues
 - identifiable bias
 - method and sources
 - relevance
 - trustworthiness
- C-9-2 Demonstrate knowledge and ability to implement best practices and research into evidence informed practice.
- C-9-3 Demonstrate knowledge and ability to participate in the involvement of clients, families and inter-professional team in formalized research.
- C-9-4 Demonstrate ability to collaborate with research team to plan, conduct and evaluate nursing research.