Mapping of Adult Critical Care Nursing Diploma Curricular Competencies with Assessment Tools



This outline maps curricular competencies\objectives with the assessment tools and potential test type. Tests will emphasize certain parts of the outline, and no single test will include questions on all aspects. Questions may include content that is not included in this outline.

Construct Domain		Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Topic	Code Performance indicator/Curriculum	Page #	Learning Domain														
						(1:Cognitive, 2:Skills, 3:Attitude)	MCQ - Promotion Written	MCQ - Final Written	OSCE - Final Clinical	SOE - Final Clinical																						
A. Medical expert	A1 Basic science	Y1	Behavioral Problems and	A1.1	Describe the relationship between stress and anxiety	20	1	*	٠		*																					
			Psychosocial Concepts	A1.2	Discuss the physical and emotional responses to stress, including the local and general adaptation syndromes, mind-body interaction, anxiety, coping, and defense mechanisms	20	1	*	*		•																					
			Advanced Health Assessment	A1.3	Integrate knowledge of pathophysiology when conducting a comprehensive health assessment for the different body systems	21	1	•	*		•																					
			Pathophysiology	A1.4	Recognize physiological changes occurring during life-threatening illnesses.	22	1																									
			and Nursing Management	A1.5	Understand the pathophysiology of disease processes commonly seen in critically ill	22	1		*																							
					patients.																											
				A1.6	Understand the inflammatory response and infection process.	22	1		•																							
				A1.7	Discuss fluid, electrolyte, and acid-base balance and imbalances.	22	1	*	•		*																					
				A1.8	Explain the pathophysiology of shock.	22	1	•	*		*																					
				A1.9	Compare the physiological changes seen in different types of medical emergencies.	23	1	*	•		*																					
				A1.10	Interpret knowledge related to pathophysiological changes to implement appropriate nursing interventions.	23	1	*	*		*																					
			Pharmacology for Critically III	A1.11	Discuss the principles of pharmacokinetics, pharmacodynamics, and drug interactions;	24	1	*	•		٠																					
			Patients	A1.12	Discuss the clinical pharmacology of anticoagulant and thrombolytic drugs;	24	1	*																								
					Describe toxicological emergencies that occur in the prehospital setting;	24	1	*	•																							
				A1.14	Recognize the major classifications and types of drugs used in critical care settings.	24	1		•																							
		Y2	Epidemiology	A1.15	Describe the mechanisms and dynamics of disease transmission in populations and the risk factors that determine their distribution;	26	1		•		•																					
					A1.16	Calculate measures of morbidity, mortality, incidence, and prevalence;	26	1		•		*																				
				A1.17	Assess the validity and reliability of diagnostic and screening tests;	26	1																									
					Explain the different mechanisms used to describe disease prognosis in quantitative terms for groups of patients;	26	1		*		*																					
						A1.19	Differentiate between association and causation;	26	1		*		*																			
								Explain the role of genetic and environmental factors in disease causation;	26	1																						
															*																	
						Apply epidemiologic methods to evaluate screening programs;	26	1																								
					Identify the basic principles of epidemiology.																											
				A1.23	Describe the dynamics of disease transmission and occurrence.	26	1		•		*																					
				A1.24	Determine the associations among diseases and other variables of interest (e.g., patient characteristics), and estimate the potential for disease prevention.	26	1		•		•																					
																										Identify the roles of genetic and environmental factors that contribute to the causation and occurrence of disease.	26	1		•		
					Intensive Care Nursing Practicum	A1.26	Understand the principles of the electrocardiogram (ECG) and 12-Leads ECGs;	32	1		•		*																			
			ľ	A1.27	Discuss the difference between internal and parenteral nutrition;	32	1		•		*																					
	A2 Assessment & Diagnosis	Y1	Foundations of Intensive Care Nursing	A2.1	Obtain initial subjective and objective data from the critically ill patient	18	2			•																						
				A2.2	Monitor and interpret pulse oximetry and carbon dioxide levels.	19	2																									
				A2.3	Monitor vascular access.	19	2			*																						
				A2.4	Differentiate among the potential stressors in the critical care environment	18	1	*	•																							
			Behavioral Problems and Psychosocial Concepts	A2.5	Identify the stages of the grieving process	20	1	•	*		•																					
				A2.6	Recognize the emotional implications of transferring a patient from the critical unit	20	1	•	•		*																					
			Advanced Health Assessment		Demonstrate knowledge of health assessment skills	21	1.2	•	*	*	•																					
				A2.8	Comprehend the various components of a comprehensive health assessment	21	1	*	•		*																					
				A2.9	Determine the four basic assessment techniques of physical examination (i.e., inspection, auscultation, palpation, and percussion) and their mnemonic sequences	21	1,2	*	*	*	•																					

			A2.10	Describe the use of primary and secondary surveys to diagnose and manage life-threatening injuries.	21	1		*			
			A2.11	Utilize principles of interviewing techniques when assessing ICU patients.	22	1,2	•	•	•		
			A2.12	Demonstrate competence in performing physical examination skills using the correct mnemonics.	22	2			•		
			A2.13	Assess patients systematically and according to priorities.	22	1	*			*	
			A2.14	Monitor new technologically complex procedures.	22	2			*		
			A2.15	Perform a pain assessment.	22	1,2	•	*	*	*	
			A2.16	Apply primary and secondary surveys to diagnosis and manage life-threatening injuries.	22	1		•		*	
			A2.17	Collect, analyze, interpret, and document data correctly.	22	1,2	*			*	
		Pharmacology for	A2.18	Describe hemodynamic monitoring and normal values.	25	1	•	•		•	
		Critically III Patients									
		Pathophysiology and Nursing	A2.19	Demonstrate knowledge of the assessment of patients with organ/system disorders.	23	1,2	•	•	•	٠	
		Management	A2.20	Monitor pathophysiological alterations seen in different types of medical emergencies.	23	1,2			•		
			A2.21	Monitor patients' homeostasis.	23	1,2		*	*	*	
	Y2	Intensive Care	A2.22	Monitor a cardiac ECG and demonstrate skills for a 12-Leads ECG interpretation and tracing.	32	1,2		•			
		Nursing Practicum	A2.23	Use the Glasgow Coma Scale in the clinical setting.	32	1,2		*			
			A2.24	Describe the route used for blood glucose monitoring and the nursing care for diabetic	32	1,2					
				ketoacidosis;							
		Intensive Care Nursing Practicum	A2.25	Effectively monitor central venous pressure (CVP)	33	1,2		*	*	•	
		"	A2.26	Assist with arterial lines and related hemodynamics monitoring	33	1,2		*	*	•	
			A2.27	Assist with the insertion of a peripherally inserted central catheter (PICC) line and provide related nursing care	33	1,2					
			A2.28	Assist with chest tube (CT) insertion, monitoring	33	1,2		*	*	*	
			A2.29	Assist with intracranial pressure (ICP) and external ventricular drain (EVD) insertion, monitoring	33	1,2		*	*		
			A2.30 A2.31	Implement nursing care related to CVP and interpretation of CVP-related data Demonstrate competence when assisting with the insertion of an arterial line and in the	33	1,2		•	*	•	
			A2.32	interpretation of arterial line parameters. Demonstrate optimal safety during the administration of blood and blood products	33	1,2					
			A2.33	transfusions. Demonstrate competence in implementing CRRT operations and monitoring.	33	1,2					
			A2.33	Demonstrate competence in implementing chirt operations and montoring.	33	1,2					
A3 Management	Y1	Foundations of Intensive Care	A3.1	Describe the different methods of therapeutic-airway management	18	1	•	*		٠	
		Nursing	A3.2	Describe the principles of wound and burn management	18	1		*		•	
			A3.3	Demonstrate cardiopulmonary resuscitation techniques Assist the patient undergoing invasive procedures	18	1,2			*		
			A3.5	Assist with pleural decompression (thoracentesis).	19	1,2	*		*		
			A3.6	Administer IV infusion fluids, blood, and blood products.	19	1,2			*		
			A3.7	Perform suctioning from different orifices.	19	1,2		*			
			A3.8	Participate in direct current defibrillation for ventricular fibrillation.	19	1,2	*	*		*	
			A3.9	Contribute to/participate in synchronized cardioversion.	19	2			•		
				A3.10	Implement the basic principles of time management in the performance of nursing activities to care for critically ill patients. The learner will prioritize a plan of care according to the changing acuity of a patient	18	1		*		•
			A3.11	Assist airway management and ventilation.	19	1,2		*			
			A3.12	Select strategies to minimize stressors in the critical care environment on patients and families	18	1,2		*	*	•	
		Ethics in Nursing and Dimensions of Care	A3.13	Discuss the process of organ procurement and transplantation, and facilitate the process in brain-dead patients.	19	1		*		•	
			A3.14	Discuss the impact of current issues related to healthcare delivery	19	1	•	*		*	
		Behavioral Problems and	A3.15	Identify the stages of the grieving process and describe nursing interventions for each stage	20	1	-	*			
		Psychosocial Concepts	A3.16	Utilize stress-management resources available for patients and families.	21	3					
			A3.17	Apply proper interventions with dying patients and their families.	21	1	*	*			
			A3.18	Demonstrate psychosocial interventions with patients and/or families with ineffective coping methods.	21	1	•	*		•	
			A3.19	Describe interventions that help the patient cope with the emotional implications of transferring a patient from the critical unit	20	1	•	*			

		Advanced Health	A3.20	Apply primary and secondary surveys to diagnosis and manage life-threatening injuries.	22	1				
		Assessment	713.20	ryphy primary and secondary surveys to diagnoss and manage me timedetining injuries.		•				
			A3.21	Collect, analyze, interpret, and document data correctly.	22	1	•	*		*
			A3.22	Prepare equipment necessary to perform a health assessment.	22	1,2	*	*	*	*
		Pathophysiology and Nursing Management	A3.23	Measure fluid intake and output correctly.	23	2			*	
		Pharmacology for	A3.24	Apply knowledge of the legal and ethical aspects of drug administration and the importance	24	1				
		Critically III Patients		of correct drug calculations to nursing practice;						
			A3.25	Demonstrate the specialized administration rates used in critical and emergency care.	25	2			•	
			A3.26	Calculate drug dosages, read prescriptions, and become familiar with commonly use medical abbreviations;	24	1,2	•	*		
			A3.27	Apply knowledge of the principles and routes of drug administration and storage forms. Calculate appropriate drug dosages.	25 25	1,2	*	•		*
			A3.29	Administer drugs through a variety of routes safely and efficiently	25	2			*	-
			A3.30	Utilize the systems of drug-dose and drug-level measurement: units of measurement.	25	1				
	Y2	Intensive Care Nursing Practicum	A3.31	Manage patients undergoing invasive hemodynamic monitoring.	32	1		*		*
			A3.32	Administer interal and parenteral nutrition.	32	1				
			A3.33	Manage patients undergoing suprapubic bladder drainage.	32	1		•		
			A3.34	Teach patients to monitor their blood glucose and perform self-administered injections of Insulin.	32	2			*	
			A3.35	Discuss the measures used to control hemorrhage related to head trauma, such as subdural hematoma and subarachnoid hemorrhage;	32	1		•		
			A3.36	Describe the route used for blood glucose monitoring and the nursing care for diabetic ketoacidosis;	32	1		*		
		Intensive Care Nursing Practicum	A3.37	Administer blood and blood-products transfusions safely to patients in ICUs	33	1,2		•	•	•
		II	A3.38	Provide evidence-based nursing care for patients with a CVA	33	1,2		•	*	*
			A3.39	Manage continuous renal replacement therapy (CRRT) operation and monitoring in accordance with the ICU's protocols.	33	1		•		
			A3.40	Provide nursing care for patients on central venous pressure (CVP) monitoring	33	1,2		•	•	*
			A3.41	Provide nursing care for patients with chest tubes	33	1,2		•	*	*
			A3.42	Provide nursing care for patients with external ventricular drain	33	1,2		•	•	*
		Intensive Care Nursing Practicum I	A3.43	Insert a urinary bladder catheter correctly and manage patients undergoing supra-pubic bladder drainage.	32	1,2		•	*	
			A3.44	Apply principles to nasogastric tube insertion and removal.	32	2			•	
			A3.45	Perform urinary bladder catheter insertion and removal.	32	2			*	
			A3.46	Perform the measures used for control of esophageal bleeding.	32	2			•	
		Intensive Care Nursing Practicum II	A3.47	Effectively monitor central venous pressure (CVP) and provide related nursing care	33	1,2		•	•	*
			A3.48	Assist in central venous catheter (CVC) insertion	33	2			•	
			A3.49	Assist with arterial lines and related hemodynamics monitoring	33	1,2		*	*	*
			A3.50	Assist with the insertion of a peripherally inserted central catheter (PICC) line and provide related nursing care	33	1,2		*	•	*
			A3.51	Assist with chest tube (CT) insertion, monitoring, and nursing care	33	1,2		•	•	*
			A3.52	Assist with intracranial pressure (ICP) and external ventricular drain (EVD) insertion, monitoring, and related nursing care;	33	1,2		*	*	•
			A3.53	Implement nursing care related to CVP and interpretation of CVP-related data	33	1,2		*	•	*
			A3.54	Demonstrate competence when assisting with the insertion of an arterial line and in the interpretation of arterial line parameters.	33	1,2		*	•	•
			A3.55	Demonstrate optimal safety during the administration of blood and blood products transfusions.	33	3			•	
			A3.56	Perform the ideal nursing care for patients with PICC lines.	33	2			•	
			A3.57	Implement proficiency in providing nursing care for the patient with a chest tube.	33	1,2		•	•	*
			A3.58	Demonstrate effective knowledge and clinical skills when providing nursing care for patients with CVAs, ICPs, and EVDs.	33	1,2		•	*	
				Demonstrate competence in implementing CRRT operations and monitoring.	33	1,2				1 .
A4 Health	Y1	Infection Control	A4.1	Delineate the professional responsibilities associated with monitoring infection-control	23	1,3				

			A4.2	Explain the chain of the spread of infection and describe the ways infection control concepts are applied	23	1	*	*		
			A4.3	Wear barriers and personal protective equipment (PPE) for the protection from exposure to	23	3				
			A4.4	potentially infectious materials Explain the importance of reprocessing methods (cleaning, disinfection, and sterilization) to	23	1				
			7,4,.4	ensure the safety and integrity of patient-care equipment;						
			A4.5	Identify occupational health strategies to prevent the transmission of blood borne pathogens and other communicable diseases through healthcare workers.	23	1	•	*		*
			A4.6	Apply the five moments for hand hygiene.	24	3			•	
			A4.7	Apply all standard precautions.	24	2			*	
			A4.8	Apply air born precautions.	24	2			*	
			A4.9	Apply contact precautions.	24	2			*	
			A4.10	Apply droplet precautions.	24	2			*	
			A4.11	Apply knowledge of the correct use of PPE.	24	1	*	*		*
			A4.12	Implement infection-control precautions.	24	1	*	*		*
		Pharmacology for Critically III Patients	A4.13	Apply basic precautions to ensure safe drug administration.	25	1	*	*		•
		Ethics in Nursing and Dimensions of Care	A4.14	Discuss nosocomial infections, medical errors, and medication errors.	20	1	*	٠		*
	Y2	Epidemiology	A4.15	Determine the associations among diseases and other variables of interest (e.g., patient characteristics), and estimate the potential for disease prevention.	26	1		*		•
B. Communicator	Y1	Behavioral Problems and	B.1	ldentify communication and interpersonal relationship skills used in the emergency management of critically ill patients and their families;	20	1	•	*		•
		Psychosocial Concepts	B.2	Interact effectively with patients and their caregivers in times of extreme stress or crisis.	21	3			•	
			B.3	Apply principles of interpersonal communication in critical care settings and/or crisis situations.	21	1:3	•	*	•	
		Advanced Health	B.4	Utilize effective communication skills with family members to conduct a health history if the	22	3				
		Assessment		patient is unconscious.						
	Y2	Healthcare Informatics	B.5	Describe nursing informatics as an emerging field and identify key factors and legislative organizations that have helped shape nursing informatics	29	1		*		
			B.6	Discuss evolving models and theories that define the roles of and competencies in nursing informatics	29	1		*		
			B.7	Explain the implications of nursing informatics for nursing practice, administration, education, and research	29	1		*		
			B.8	Demonstrate skills in the acquisition and retrieval of nursing information using health information systems within institutions and through the worldwide web and various electronic resources	29	2				
			B.9	Apply methods to safeguard data and information integrity while maintaining privacy and confidentiality.	29	1		*		
			B.10	Assess the application of information and communication technology (ICT) in the management of patients/patient-related data.	29	1		*		
			B.11	Identify different models of computerized health-care electronic records.	29	1		•		
			B.12	Differentiate among the models of health information management systems.	29	1		•		
			B.13	Analyze the implications for healthcare delivery arising from tele-health and telemedicine.	29	1		*		
			B.14	Recognize the impact of the information-technology revolution on nursing practice.	29	1		*		
			B.15	Apply skills to access, create, store, and retrieve nursing–related information from the internet and the worldwide web.	29	1		*		
			B.16	Demonstrate ways of integrating nursing informatics with nursing administration, education, clinical practice, and research.	29	3				
			B.17	Identify security regulations to safeguard data consisting of information about patients and organizations.	29	1		*		
			B.18	organizations. Recognize ethical issues related to nursing informatics.	29	1		*		
			B.19	Assess the future of information technology and its impact on the nursing practice.	29	1		*		
		Professional Development	B.20	Identify differences between effective and ineffective communication	31	1		•		*
			B.21	Identify skills required for therapeutic communication.	31	1		*		*
			B.22	Discuss the meaning of active listening	31	1		*		*
			B.23	Identify three skills necessary for active listening	31	1		*		*
			B.24	Describe ways patients and coworkers benefit when nurses communicate effectively	31	1		*		*
			B.25	Discuss the difference between "I" and "You" statements	31	1		•		*
			B.26	Describe and provide examples of differences between effective and ineffective communication.	31	1		*		•
			B.27	Define and demonstrate the meaning of active listening.	31	1		*		*
			B.28	Demonstrate three skills necessary for active listening.	31	1		*		*

			B.29	Demonstrate through role-play, three ways patients and coworkers benefit when nurses	31	2		*	
			B.30	communicate effectively. Demonstrate the difference between "I" and "You" statements.	31	1			
				Demonstrate through role-play, the skills required for therapeutic communication.	31	2		*	
						_			
C. Collaborator	Y2	Leadership and Management	C.1	Collaborate with multidisciplinary healthcare team members in prioritizing and coordinating health care that is high quality and cost effective	30	3			
D Manager/ Leader	Y2	Leadership and Management	D.2	Employ the skills of the nursing process, critical thinking, ethical decision-making, communication, and therapeutic nursing interventions in managing culturally competent	30	3			
				and cost-effective care of groups of patients across the wellness/illness continuum					
			D.3	Analyze the components of organizational structure and culture	30	1	•		*
			D.4	Apply theories of effective leadership and management in selected healthcare areas	30	1	•		*
			D.5	Apply "systems thinking" to analyses of healthcare organizations.	30	1			
			D.6	Utilize effective time-management skills.	30	3			
			D.7	Discuss and implement the principles of information management.	30	1	٠		٠
			D.8	Utilize resources effectively (i.e., staffing and scheduling, resource allocation, etc.)	30	3			
			D.9	Examine a healthcare organization's financial management (cost analyses, budget	30	1			
			D.10	forecasting, etc.) Develop plans for quality and risk management (quality plans, risk management models,	30	1			
			D.11	etc.). Use organizational principles to manage organizational change and conflict resolution.	30	3			
				Outline the steps of the strategic planning process.	30	1	٠		•
				Identify the components of strategic management.	30	1	•		
			D.14	Demonstrate leadership and management of a care-giving team comprised of individuals	30	3		*	
				with varied cultural backgrounds and levels of clinical knowledge and competencies					
			D.15	Demonstrate professional accountability for effective leadership in nursing practice;	30	3			
			D.16	Contribute to the organization's strategic planning and its implementation at different levels within the healthcare facility.	30	3			
			D.17	Develop a career plan based on trends in health care.	30	1			
		Professional Development	D.18	Provide care in an inter-professional environment	31	3			
E Scholar	Y2		E.1	Assess the efficacy of preventive and therapeutic measures via randomized trials	26	1			
E Scholar	Y2	Development	E.1 E.2	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective)	26 26	1			
E Scholar	Y2	Development	E.1 E.2	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and	26	1			
E Scholar	Y2	Development	E.1 E.2	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective)	26 26	1			
E Scholar	Y2	Development	E.1 E.2 E.3 E.4 E.5	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies.	26 26 26 26 26	1 1 1 1			
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence-	E.1 E.2 E.3 E.4 E.5	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology	26 26 26 26 26 26 27	1 1 1 1 1	•		
E Scholar	Y2	Development Epidemiology Nursing Research	E.1 E.2 E.3 E.4 E.5 E.6 E.7	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies.	26 26 26 26 26	1 1 1 1			
E Scholar	Υ2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs	26 26 26 26 26 26 27 27	1 1 1 1 1 1 1 1			
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed	26 26 26 26 26 27 27 27	1 1 1 1 1 1 1 1 1 1 1			
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal	26 26 26 26 26 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1			
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to	26 26 26 26 26 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice;	26 26 26 26 26 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
E Scholar	ν2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice	26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings	26 26 26 26 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through	26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
E Scholar	ν2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through nursing research.	26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17 E.18	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through	26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
E Scholar	Υ2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17 E.18	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through nursing research. Demonstrate familiarity with research terminology.	26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17 E.18 E.19 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17 E.18 E.19 E.20	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through nursing research. Demonstrate familiarity with research terminology. Demonstrate familiarity with research designs.	26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27		•		
E Scholar	Y2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17 E.18 E.19 E.20 E.21 E.22	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through nursing research. Demonstrate familiarity with research terminology. Demonstrate familiarity with research terminology. Demonstrate knowledge of research designs. Conduct a literature search using all resources (electronic and non-electronic resources). Gather and interpret relevant data to make judgments. Identify evidence-based principles and their application to practice.	26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1	•		
E Scholar	Υ2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17 E.18 E.19 E.20 E.21 E.22 E.23	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through nursing research. Demonstrate familiarity with research terminology. Demonstrate familiarity with research terminology. Demonstrate knowledge of research designs. Conduct a literature search using all resources (electronic and non-electronic resources). Gather and interpret relevant data to make judgments. Identify evidence-based principles and their application to practice. Apply a critical appraisal approach to all steps of the research process.	26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1 1 1 1 1			
E Scholar	ν2	Development Epidemiology Nursing Research and Evidence- Based Practice in	E.1 E.2 E.3 E.4 E.5 E.6 E.7 E.8 E.9 E.10 E.11 E.12 E.13 E.14 E.15 E.16 E.17 E.18 E.19 E.20 E.21 E.22 E.23 E.24	Assess the efficacy of preventive and therapeutic measures via randomized trials Critique epidemiological study designs (cohort, cross-sectional, retrospective, and prospective) Identify potential biases, confounders, and interacting factors in an epidemiological study Identify the sources of information for disease occurrence Critique medical and other health-related research studies. Define the basic concepts of research methodology Describe different research designs Describe different research designs Describe the scientific process and its use in nursing research Design a research proposal Define the steps of the research process in the proposal and/or conduct a circumscribed nursing research project Identify research project Identify research problems and the components of the literature review process related to nursing practice; Compare and contrast research designs Discuss appropriate statistical techniques used in the analysis of data Critique current studies of nursing practice Discuss the utilization of research findings Discuss the historical perspective of evidence-based practice Define and apply evidence-based practice principles, which have been identified through nursing research. Demonstrate familiarity with research terminology. Demonstrate familiarity with research terminology. Demonstrate knowledge of research designs. Conduct a literature search using all resources (electronic and non-electronic resources). Gather and interpret relevant data to make judgments. Identify evidence-based principles and their application to practice.	26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1			

		1	E.26	Apply the research process to the design and implementation of a research project.	27	1				
			E.27	Prepare a manuscript for publication.	27	1				
		Biostatistics	E.28	Demonstrate familiarity with statistical terminology and the purpose of statistics	28	1				
			E.29	Define and compute measures of central tendency and variability	28	1,2				
			E.30	Demonstrate an understanding of the analysis of statistical data within the context of the research process	28	1		*		
				Provide the necessary statistical rationale for analyzing data and drawing inferences from the analysis	28	1				
			E.32	Demonstrate understanding of the logic of hypothesis testing.	28	1				
				Demonstrate familiarity with the terminology of biostatistics, as listed in the module's outline.	28	1		*		
			E.34	Demonstrate organization of data.	28	3				
			E.35	Discuss the logic of hypothesis testing.	28	1				
			E.36	Analyze data and draw inferences from the analysis.	28	1				
			E.37	Demonstrate an understanding of the role of statistical data in the research process.	28	1				
		Leadership and Management	E.38	Utilize inquiry and research skills to enhance the healthcare team's knowledge base, facilitate change, and improve quality of care	30	3				
		Professional Development	E.39	Initiate independent learning activities	31	3				
F Health advocate	Y1	Behavioral	F.1	Develop a sense of responsibility, accountability, and advocacy in the care of the critically ill.	21	3				
r nealth advocate	11	Problems and Psychosocial	r.1		21	3				
		Concepts	F.2	Teach critically ill patients and their families about crisis management and coping.	21	2			•	
	Y2	Professional Development	F.3	Advocate for the health and safety of patients;	31	3				
G Professional	Y1	Foundations of Intensive Care Nursing	G.1	Appraise the functions and responsibilities of the professional critical care nurse and select essential criteria for establishing a professional portfolio;	18	3				
		Ethics in Nursing and Dimensions of Care	G.2	Examine the nature and role of ethical theories in guiding sound ethical decision-making in workplace settings	19	1	•	*		•
		Curc	G.3	Discuss the ethical and legal contexts of professional nursing practice	19	1		•		*
			G.4	Examine key ethical issues occurring in nursing and related healthcare contexts	19	1	•	•		*
			G.5	Discuss the processes for achieving desired moral outcomes in nursing and healthcare domains	19	1		*		•
			G.6	Analyze the conflicting duties and rights inherent in moral dilemmas	19	1	•	•		*
			G.7	Use ethical reasoning to synthesize standards of practice, ethical principles, and legal/regulatory requirements in the resolution of ethical dilemmas	19	1		*		•
			G.8	Discuss the relevant ethical issues of traumatized patients	19	1				
			G.9	Discuss staff members' refusal to implement Do Not Resuscitate (DNR) orders from the family members	19	1		*		•
			G.10	Recognize the importance of family members' desire to attend the resuscitation of their loved ones	19	1		*		*
			G.11	Identifies basic ethical principles related to emergency management in the Kingdom of Saudi Arabia.	20	1		*		•
				Distinguishes between moral and legal concepts in relation to trauma diagnosis and treatment.	20	1		*		•
			G.13	Identifies ethical and cultural life-and-death considerations encountered in the Kingdom of Saudi Arabia.	20	1		*		•
			G.14	Demonstrates knowledge by identifying common ethical dilemmas related to trauma patients.	20	1		*		•
			G.15	Lists ethical issues related to organ procurement and organ donation.	20	1				
			G.16	Discuss the bereavement process and brain death certification.	20	1	٠	•		•
		Behavioral Problems and	G.17	Discuss the relevant ethical issues of traumatized patients.	20	1	•	•		•
		Psychosocial Concepts	G.18	Demonstrate respect for patients' dignity and autonomy.	21	3			*	
	Y2	Professional	G.19	Assume responsibility for personal and professional development;	31	3				
		Development								