

Mapping of Neonatal Intensive 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	Rotation	Year	Code	Performance Indicator (Curriculum)	Page #	Learning Domain (1:Cognitive, 2:Skills, 3:Attitude)	Assessment Method				
								MCQ - Promotion Written	MCQ - Final Written	OSCE - Final Clinical	SOE - Final Clinical	
A. Medical Expert	A1. Basic science	A1.1 Safe drug prescribing	D1	A1.1.1	Recognize the importance of safe drug prescribing in healthcare.	13	1	*	*	*	*	
				A1.1.2	Describe the various adverse drug reactions, citing examples of commonly prescribed drugs that can cause such reactions.	13	1	*	*	*	*	
				A1.1.3	Apply principles of drug-drug interactions, drug-disease interactions, and drug-food interactions into common situations.	13	1	*	*	*	*	
				A1.1.4	Apply the principles of prescribing drugs in special situations, such as renal failure and liver failure.	13	1	*	*	*	*	
				A1.1.5	Apply the principles of prescribing drugs in elderly, pediatrics age group patients, and during pregnancy and lactation.	13	1	*	*	*	*	
		A1.2 Hospital-Acquired Infections (HAIs)	D1	A1.2.1	Discuss the epidemiology of HAIs, with special reference to HAIs in Saudi Arabia.	13	1	*	*	*	*	
				A1.2.2	Recognize HAIs as one of the major emerging threats in healthcare.	13	1	*	*	*	*	
				A1.2.3	Identify the common sources and set-ups of HAIs.	13	1	*	*	*	*	
				A1.2.4	Describe the risk factors of common HAIs, such as ventilator-associated pneumonia, MRSA, CLABSI, and Vancomycin-resistant Enterococcus (VRE).	13	1	*	*	*	*	
		A1.3 Blood Transfusion	D1	A1.3.1	Review the different components of blood products available for transfusion.	13	1	*	*	*	*	
				A1.3.2	Recognize the indications and contraindications for blood product transfusion.	13	1	*	*	*	*	
				A1.3.3	Discuss the benefits, risks, and alternatives to transfusion.	13	1	*	*	*	*	
		A1.4 Recognition and Management of Diabetic Emergencies	D1	A1.4.1	Describe the pathogenesis of common diabetic emergencies, including their complications.	14	1	*	*	*	*	
				A1.4.2	Identify risk factors and groups of patients vulnerable to such emergencies.	14	1	*	*	*	*	
				A1.4.3	Recognize a patient presenting with a diabetic emergency.	14	1	*	*	*	*	
		A1.5 Pre-Operative Assessment	D2	A1.5.1	Describe the basic principles of pre-operative assessment.	15	1	*	*	*	*	
				A1.5.2	Categorize patients according to risks.	15	1	*	*	*	*	
		A1.6 Post-Operative Care	D2	A1.6.1	Describe the process of a patient's post-operative recovery.	15	1	*	*	*	*	
		A1.7 Foundations of Neonatal Nursing	D1	A1.7.1	Comprehend the role and responsibilities of a registered, professional, neonatal nurse.	17	1	*	*	*	*	
				A1.7.2	Describe low-risk management, including fetal monitoring guidelines.	17	1	*	*	*	*	
				A1.7.3	Categorize maternal and neonatal risk factors that may exist during pregnancy and the postpartum period.	17	1	*	*	*	*	
				A1.7.4	By the end of this module, trainees must be competent in the following: - Cardiocography (CTG).	17	1-2	*	*	*	*	
				A1.7.5	By the end of this module, trainees must be competent in the following: - Preparation of neonatal delivery environment.	17	1-2	*	*	*	*	
		A1.8 Foundation of Neonatal Nursing Practicum	D1	A1.8.1	Determine Apgar scores for newborns.	18	1-2	*	*	*	*	
				A1.8.2	Demonstrate understanding of the normal growth and development of a newborn.	18	1	*	*	*	*	
				A1.8.3	Maintain a newborn's temperature by applying accurate thermoregulation principles and measurement methods.	18	1-2	*	*	*	*	
				A1.8.4	Provide safe basic nursing care to normal newborns.	18	1-2	*	*	*	*	
				A1.8.5	Administer appropriate vaccination for neonates.	18	2			*	*	
				A1.8.6	Perform required screening procedures, (e.g., newborn screening, hearing assessment)	18	2			*	*	
				A1.8.7	By the end of this module, trainees are expected to be competent in the following: - Vital signs measurement for newborns.	19	2			*	*	
				A1.8.8	By the end of this module, trainees are expected to be competent in the following: - Newborn screening tests.	19	1-2	*	*	*	*	
				A1.8.9	By the end of this module, trainees are expected to be competent in the following: - Neonatal bathing.	19	2			*	*	
				A1.8.10	By the end of this module, trainees are expected to be competent in the following: - Vaccination administration.	19	2			*	*	
				A1.8.11	By the end of this module, trainees are expected to be competent in the following: - Neonatal feeding.	19	2			*	*	
				A1.8.12	By the end of this module, trainees are expected to be competent in the following: - Blood glucose measuring.	19	2			*	*	
				A1.8.13	By the end of this module, trainees are expected to be competent in the following: - Medication administration.	19	2			*	*	
				A1.8.14	By the end of this module, trainees are expected to be competent in the following: - Phlebotomy.	19	2			*	*	
				A1.8.15	By the end of this module, trainees are expected to be competent in the following: - Urineanalysis.	19	2			*	*	

		A1.8.16	By the end of this module, trainees are expected to be competent in the following: - Weight and length measurement.	19	2			*	*
A1.9 Neonatal Resuscitation and Stabilization of the Newborn	D1	A1.9.1	Identify the needed preparation for neonatal resuscitation.	19	1		*	*	*
		A1.9.2	Demonstrate the initial steps of neonatal resuscitation.	19	2			*	*
		A1.9.3	Decide the appropriate action needed to resuscitate a newborn based on newborn-specific parameters.	19	1		*	*	*
		A1.9.4	Identify the indications for practicing positive pressure ventilation and chest compression to resuscitate the newborn.	19	1		*	*	*
		A1.9.5	Apply the American Academy of Pediatric/American Heart Association guidelines in resuscitating a newborn in the delivery room.	19	1		*	*	*
		A1.9.6	Illustrate a nurse's role in transporting a neonate.	19	2			*	*
A1.10 Neonatal Pathophysiology	D1	A1.10.1	Describe the common pathophysiological changes occurring during the perinatal and neonatal period.	20	1		*	*	*
		A1.10.2	Relate pathophysiological changes to the assessment findings of common neonatal disorders in different body systems.	20	1		*	*	*
		A1.10.3	Interpret complications related to pathological conditions.	20	1		*	*	*
		A1.10.4	Interpret abnormalities related to acid-base balance and blood gases.	20	1		*	*	*
A1.11 Essential Nursing Practices in the NICU	D1	A1.11.1	Describe the role of a neonatal nurse in controlling the heat balance of a premature infant.	22	1		*	*	*
		A1.11.2	Describe the common popular complementary and alternative medicine in the NICU, such as kangaroo care (skin-to-skin holding) and infant massage.	22	1		*	*	*
		A1.11.3	Describe the mechanisms, behavior responses, and long-term consequences of neonatal pain.	22	1		*	*	*
A1.12 Epidemiology	D1	A1.12.1	Describe the mechanisms and dynamics of disease transmission in populations and the risk factors determining their distribution.	25	1		*	*	*
		A1.12.2	Calculate the measures of morbidity and mortality incidence and prevalence.	25	1		*	*	*
		A1.12.3	Explain the different mechanisms used to describe disease prognosis in quantitative terms for groups of patients.	25	1		*	*	*
		A1.12.4	Differentiate between association and causation.	25	1		*	*	*
		A1.12.5	Explain the role of genetic and environmental factors in disease causation.	25	1		*	*	*
		A1.12.6	Apply epidemiologic methods to evaluate screening programs.	25	1		*	*	*
		A1.12.7	Identify the sources of information on disease occurrence.	25	1		*	*	*
		A1.12.8	Demonstrate understanding the basic principles of epidemiology.	26	1		*	*	*
		A1.12.9	Illustrate competently the dynamics of disease transmission and incidence.	26	1		*	*	*
		A1.12.10	Demonstrate knowledge by determining disease associations and estimating the potential for disease prevention.	26	1		*	*	*
		A1.12.11	Able to articulate the roles of genetic and other environmental factors in diseases' causation and incidence.	26	1		*	*	*
		A1.12.12	Demonstrate ability in identifying the reliability and validity of screening tests.	26	1		*	*	*
A1.13 Pharmacology in Neonatal Intensive Nursing Care	D2	A1.13.1	Discuss the factors affecting the action and use of medications in neonates.	29	1		*	*	*
		A1.13.2	Describe the principles of pharmacokinetics and pharmacodynamics and drug interactions in neonates.	29	1		*	*	*
		A1.13.3	Distinguish between neonates' and other children's responses to drug therapy.	29	1		*	*	*
		A1.13.4	Integrate pharmacology, pathophysiology, and symptomatology.	29	1		*	*	*
		A1.13.5	Recognize the effect of antenatal drugs on neonates' health.	29	1		*	*	*
		A1.13.6	Identify the emergency medications in the NICU.	29	1		*	*	*
		A1.13.7	Interpret the adverse reactions associated with drug therapy.	29	1		*	*	*
		A1.13.8	Comprehend the indications for correct drug choice, usual dose, routes of administration, pharmacological mechanisms, contra-indications, toxicity, and allergies of drugs used in the NICU.	29	1		*	*	*
		A1.13.9	Identify the anesthetic agents and analgesics commonly used in pediatric practices.	29	1		*	*	*
		A1.13.10	Calculate drug dosage and infusion flow rate following different rules and methods.	29	1		*	*	*
		A1.13.11	Document drug practice using appropriate format.	29	2			*	
		A1.13.12	Describe the vaccinations needed in the NICU.	29	1		*	*	*
		A1.13.13	Select the appropriate routes for medication administration.	29	1		*	*	*
		A1.13.14	Check types, rate, amount, and indications for different IV fluids prescribed for newborns.	29	1		*	*	*
		A1.13.15	Drug calculation.	30	2			*	*
		A1.13.16	Effective administration of drugs with different routes.	30	2			*	*
		A1.13.17	Administration of vaccinations.	30	2			*	*
		A1.13.18	Demonstrate understanding of adverse reactions to and the side effects of medications.	30	1		*	*	*
		A1.13.19	Administer IV fluids to neonates with accurate amount and rate, and demonstrate understanding of indications for different IV fluids prescribed for newborns.	30	1-2		*	*	*
		A1.13.20	Safety measure application principles in relation to neonatal drug administration.	30	1		*	*	*

A1.14 Advanced Nursing Care of Critically Ill Neonatal Patients	D2	A1.14.1	Integrate knowledge of the pathophysiological processes in developing a nursing care plan for critically ill neonates with dysfunction in different body systems.	31	1		*	*	*	
		A1.14.2	Synthesize critical thinking skills in caring for critically ill neonates with dysfunction in different body systems.	32	1		*	*	*	
		A1.14.3	Demonstrate hemodynamic monitoring used in critically ill neonates with dysfunction in different body systems.	32	1		*	*	*	
		A1.14.4	Demonstrate competence in providing pre- and post-care of critically ill neonates undergoing interventional techniques.	32	1-2		*	*	*	
		A1.14.5	Use pharmacological and non-pharmacological measures to alleviate a neonate's pain.	32	1		*	*	*	
	A1.15 Family-Centered Care	D2	A1.15.1	Articulate the concepts of FCC.	34	1		*	*	*
			A1.15.2	Understand the definition, purpose, and philosophical underpinnings of FCC in the NICU.	34	1		*	*	*
			A1.15.3	Explore the current barriers to and facilitators of delivering FCC in the NICU	34	1		*	*	*
	A1.16 Nursing Informatics	D2	A1.16.1	Describe the foundations of nursing informatics as an NIC field in the nursing profession.	35	1		*	*	*
			A1.16.2	Identify key factors and legislative organizations that help to shape nursing informatics.	35	1		*	*	*
			A1.16.3	Explain the implications of nursing informatics for nursing practice, administration, education, and research.	35	1		*	*	*
			A1.16.4	Demonstrate skills in the acquisition and retrieval of nursing information using the health information systems within the institution, the World Wide Web, and various other electronic resources.	35	2			*	*
			A1.16.5	Correctly apply information and communication technology in managing patient-related data.	36	1		*	*	*
			A1.16.6	Differentiate between models of health information management systems.	36	1		*	*	*
			A1.16.7	Demonstrate ability to access, create, store, and retrieve nursing-related information from the World Wide Web.	36	2			*	*
	A1.17 Nursing Leadership and Management	D2	A1.17.1	Demonstrate familiarity with the structure and environment of the health care organization in which they are trained.	37	3				
	A2. Assessment & Diagnosis	A2.1 Hospital-Acquired Infections (HAIs)	D1	A2.1.1	Determine appropriate pharmacological (e.g., selected antibiotic) and non-pharmacological (e.g., removal of indwelling catheter) measures in the treatment of HAIs.	13	1	*	*	*
		A2.2 Management of Diabetic Complications	D1	A2.2.1	Screen patients for such complications.	14	1	*	*	*
				A2.2.2	Provide preventive measures for such complications.	14	1	*	*	*
A2.3 Ethical issues: treatment refusal; patient autonomy		D1	A2.3.1	Predict situations where a patient or family is likely to decline prescribed treatment.	14	1	*	*	*	
			A2.3.2	Predict situations where a patient or family is likely to decline prescribed treatment.	14	1	*	*	*	
A2.4 Role of Doctors in Death and Dying		D1	A2.4.1	Identify suitable patients to palliative care services.	15	1	*	*	*	
A2.5 Pre-Operative Assessment		D2	A2.5.1	Perform a pre-operative assessment of an uncomplicated patient, with special emphasis on: i. General health assessment; ii. Cardiopulmonary assessment; iii. Medications and medical device assessment; iv. Drug allergies; v. Pain relief needs.	15	2			*	*
A2.6 Post-Operative Care		D2	A2.6.1	Identify common post-operative complications.	15	1		*	*	*
			A2.6.2	Monitor patients for possible post-operative complications.	15	1		*	*	*
A2.7 Acute Pain Management		D2	A2.7.1	Assess a patient with acute pain.	15	1		*	*	*
A2.8 Management of Fluids in Hospitalized Patients		D2	A2.8.1	Assess a patient for his/her hydration status.	16	1		*	*	*
A2.9 Foundations of Neonatal Nursing		D1	A2.9.1	Identify the normal physiologic changes of each system in pregnancy.	17	1	*	*	*	*
			A2.9.2	Identify factors affecting fetal development.	17	1	*	*	*	*
			A2.9.3	By the end of this module, trainees must be competent in the following: - Maternal health assessment.	17	1	*	*	*	*
A2.10 Foundation of Neonatal Nursing Practicum	D1	A2.10.1	Assess a newborn's gestational age.	18	1	*	*	*	*	
		A2.10.2	Discuss the characteristics of a normal newborn in order to make accurate assessments.	18	1	*	*	*	*	
		A2.10.3	Compare expected versus unexpected assessment parameters of a newborn.	18	1	*	*	*	*	
		A2.10.4	Perform precise and justified health assessments for normal newborns.	18	2			*	*	
		A2.10.5	By the end of this module, trainees are expected to be competent in the following: - Neonatal health assessment.	19	1-2	*	*	*	*	
		A2.10.6	By the end of this module, trainees are expected to be competent in the following: - Apgar score assessment.	19	1-2	*	*	*	*	
		A2.10.7	By the end of this module, trainees are expected to be competent in the following: - Gestational age assessment.	19	1-2	*	*	*	*	

A2.11 Essential Nursing Practices in the NICU	D1	A2.11.1	Identify fetal malformations that need surgical correction.	22	1	*	*	*	*	
		A2.11.2	Identify the risk factors associated with fluid and electrolyte imbalances.	22	1	*	*	*	*	
		A2.11.3	Demonstrate ability to assess, plan, and provide evidence-based nursing care for a neonate on a ventilator.	22	1	*	*	*	*	
		A2.11.4	Describe the nursing management for neonates with a blood transfusion or exchange transfusion.	22	1	*	*	*	*	
		A2.11.5	Elaborate pre-procedural and post-procedural care related to birth, prematurity, illness, or congenital malformation.	22	1	*	*	*	*	
		A2.11.6	Develop a discharge plan for a neonate in the NICU.	22	1	*	*	*	*	
	A2.12 Epidemiology	D1	A2.12.1	Assess the validity and reliability of diagnostic and screening tests.	25	1	*	*	*	*
			A2.12.2	Assess the efficacy of preventive and therapeutic measures via randomized trials.	25	1	*	*	*	*
	A2.13 Advanced Neonatal Health	D2	A2.13.1	Describe health assessment components.	28	1	*	*	*	*
			A2.13.2	Identify the antenatal history affecting neonatal health.	28	1	*	*	*	*
			A2.13.3	Identify the techniques of physical examination.	28	1	*	*	*	*
			A2.13.4	Use a systematic approach in performing health assessments of critically ill neonates.	28	2	*	*	*	*
			A2.13.5	Discriminate between normal and abnormal findings of screening physical assessment.	28	1	*	*	*	*
			A2.13.6	Document health assessment findings.	28	2	*	*	*	*
			A2.13.7	Trainees must become competent in performing a comprehensive health assessment and systematic physical examination of critically ill neonates.	28	2	*	*	*	*
	A2.14 Advanced Nursing Care of Critically Ill Neonatal Patients	D2	A2.14.1	Analyze appropriate tests used to diagnose dysfunction in different body systems of critically ill infants.	31	1	*	*	*	*
A2.15 Family-Centered Care	D2	A2.15.1	Demonstrate ability to assess the family structure and function.	34	1-2	*	*	*	*	
		A2.15.2	Identify the sources, types, signs, and symptoms of stress.	34	1	*	*	*	*	
A2.16 Nursing Informatics	D2	A2.16.1	Assess the impact of the information technology revolution on nursing practice.	36	1	*	*	*	*	
A3. Management	A3.1 Blood Transfusion	D1	A3.1.1	Recognize transfusion-associated reactions and provide immediate management.	13	1	*	*	*	*
			A3.1.2	Undertake consent for a specific blood product transfusion.	13	2	*	*	*	*
	A3.2 Recognition and Management of Diabetic Emergencies	D1	A3.2.1	Institute immediate management.	14	1	*	*	*	*
			A3.2.2	Refer the patient to the appropriate next level of care.	14	1	*	*	*	*
	A3.3 Management of Diabetic Complications		A3.3.1	Treat such complications.	14	1	*	*	*	*
	A3.4 Ethical issues: treatment refusal; patient autonomy	D1	A3.4.1	Counsel patients and families declining medical treatment in light of the patients' best interests.	14	2	*	*	*	*
			A3.5 Ethical issues: transplantation/organ harvesting; withdrawal of care	D1	A3.5.1	Counsel patients and families in light of applicable ethical and religious principles.	14	2	*	*
	A3.5.2	Guide patients and families to make informed decisions.	14		2	*	*	*	*	
	A3.6 Role of Doctors in Death and Dying	D1	A3.6.1	Provide appropriate pain management to a dying patient.	15	1	*	*	*	*
			A3.6.2	Recognize the important role a doctor can play during the dying process.	15	1	*	*	*	*
A3.6.3			Provide emotional and physical care to a dying patient and their family.	15	1,2	*	*	*	*	
A3.6.4			Refer suitable patients to palliative care services.	15	1	*	*	*	*	
A3.7 Post-Operative Care	D2	A3.7.1	Devise a post-operative care plan, including monitoring of vitals, pain management, fluid management, medications, and laboratory investigations.	15	1	*	*	*	*	
		A3.7.2	Institute immediate management of post-operative complications.	15	1	*	*	*	*	
A3.8 Acute Pain Management	D2	A3.8.1	Review the physiological basis of pain perception.	15	1	*	*	*	*	
		A3.8.2	Proactively identify patients who might be in acute pain.	15	1	*	*	*	*	
		A3.8.3	Apply various pharmacological and non-pharmacological modalities available for acute pain management.	15	1	*	*	*	*	
		A3.8.4	Provide adequate pain relief for uncomplicated patients with acute pain.	15	1	*	*	*	*	
		A3.8.5	Identify and refer patients with acute pain who can benefit from specialized pain services.	15	1	*	*	*	*	
A3.9 Chronic Pain Management	D2	A3.9.1	Review the bio-psychosocial and physiological bases of chronic pain perception.	16	1	*	*	*	*	
		A3.9.2	Discuss various pharmacological and non-pharmacological options available for chronic pain management.	16	1	*	*	*	*	
		A3.9.3	Provide adequate pain relief for uncomplicated patients with chronic pain.	16	1	*	*	*	*	
		A3.9.4	Identify and refer patients with chronic pain who can benefit from specialized pain services.	16	1	*	*	*	*	
A3.10 Management of Fluids in Hospitalized Patients	D2	A3.10.1	Review the physiological basis of water balance in the body.	16	1	*	*	*	*	
		A3.10.2	Recognize a patient with over- and under-hydration.	16	1	*	*	*	*	

			A3-10-3	Order fluid therapy (oral and/or intravenous) for a hospitalized patient.	16	1		*		*		
			A3-10-4	Monitor fluid status and response to therapy through history, physical examination, and selected laboratory investigations.	16	1			*		*	
A3-11 Management of Acid-Base and Electrolyte Imbalances	D2		A3-11.1	Review the physiological bases of acid-base and electrolyte balances in the body.	16	1			*		*	
			A3-11.2	Identify the diseases and conditions likely to cause or be associated with acid-base and electrolyte imbalances.	16	1			*		*	
			A3-11.3	Correct acid-base and electrolyte imbalances.	16	1			*		*	
			A3-11.4	Perform careful calculations, checks, and other safety measures while correcting acid-base and electrolyte imbalances.	16	1-2			*	*	*	
			A3-11.5	Monitor response to therapy through history, physical examination, and selected laboratory investigations.	16	1			*		*	
			A3-12 Foundations of Neonatal Nursing	D1	A3-12.1	By the end of this module, trainees must be competent in the following: - Management of low-risk patient.	17	1		*	*	*
A3-13 Neonatal Resuscitation and Stabilization of the Newborn	D1	A3-13.1	A trainee must be a certified NRP and BLS provider.	20								
A3-14 Essential Nursing Practices in the NICU	D1		A3-14.1	Demonstrate effective management of neonatal critical care nursing units.	22	1		*	*		*	
			A3-14.2	Maintain appropriate fluid and electrolyte balances, especially in extremely premature and low birth weight infants.	22	1		*	*		*	
			A3-14.3	Provide the basic nutritional requirements of preterm and high-risk infants, while avoiding the physiologic stress related to the delivery of enteral and parenteral nutrition.	22	1		*	*		*	
			A3-14.4	Use pharmacological and non-pharmacological measures to alleviate pain.	22	1		*	*		*	
			A3-14.5	Nursing care of neonate on continuous positive airway pressure (CPAP).	24	1		*	*		*	
			A3-14.6	Nursing care and management of ventilated neonate.	24	1		*	*		*	
			A3-14.7	Chest tube management.	24	1		*	*		*	
			A3-14.8	Oxygen therapy and pulse oximetry in neonate.	24	1		*	*		*	
			A3-14.9	Defibrillation.	24	1-2		*	*	*	*	*
			A3-14.10	Neonatal screening.	24	1		*	*		*	
			A3-14.11	Heel prick.	24	2					*	
			A3-14.12	Central venous catheter competency.	24	1-2		*	*	*	*	
			A3-14.13	12 & 15-lead ECG placement.	24	1-2		*	*	*	*	
			A3-14.14	Cool cap.	24	1-2		*	*	*	*	
			A3-14.15	Bladder aspiration/catheterization.	24	1-2		*	*	*	*	
			A3-14.16	Endotracheal intubation and extubation.	24	1-2		*	*	*	*	
			A3-14.17	Suctioning.	24	1-2		*	*	*	*	
			A3-14.18	Tracheostomy care and suctioning.	24	1-2		*	*	*	*	
			A3-14.19	TPN.	24	1		*	*		*	
			A3-14.20	Blood transfusion and exchange transfusion.	24	1		*	*		*	
			A3-14.21	Administration of vaccines.	24	1-2		*	*	*	*	
			A3-14.22	Kangaroo care.	24	1-2		*	*	*	*	
A3-15 Pharmacology in Neonatal Intensive Nursing Care	D2		A3-15.1	Illustrate the common medication used in the NICU to manage different body system disorders.	29	1		*		*		
			A3-15.2	Discuss the nursing responsibilities associated with the holistic management of drug therapy.	29	1			*		*	
			A3-15.3	Apply safety measures in relation to neonatal drug administration.	29	1			*		*	
A3-16 Advanced Nursing Care of Critically Ill Neonatal Patients	D2		A3-16.1	Demonstrate patient care management and monitoring of neonates on mechanical ventilation.	32	1-2		*	*	*		
			A3-16.2	Develop nursing care plan for neonates with different health problems (one for each system).	34	1			*		*	
A3-17 Family- Centered Care	D2		A3-17.1	Discuss the impact of hospitalization on parents.	34	1			*		*	
			A3-17.2	Identify the methods of overcoming stress among parents.	34	1			*		*	
			A3-17.3	Ensure that complex psychosocial needs are addressed.	34	3				*	*	
			A3-17.4	Identify interventions to optimize culturally sensitive family care and facilitate positive partnering with parents.	34	1				*		*
			A3-17.5	Maximize parents' participation and engagement in developing care plans for their neonates.	34	3					*	
			A3-17.6	Provide resources (community, clinical, peer support, and others) to help and support parents.	34	2						
			A3-17.7	Recognize evidence-based steps to increase and enhance the FCC approach.	34	1				*		*
A3-18 Nursing Leadership and Management	D2	A3-18.1	Demonstrate ability to think critically and solve patients' related conditions and situations by making the most appropriate decisions and delegation choices.	37	1			*		*		
A4. Health Promotion & Illness Prevention	A4.1 Hospital- Acquired Infections (HAIs)	D1	A4.1.1	Identify the role of healthcare workers in the prevention of HAIs.	13	1		*	*	*		
			A4.1.2	Propose a plan to prevent HAIs in the workplace.	13	2						

		A4.2 Blood Transfusion	D1	A4.2.1	Perform the steps necessary for safe transfusion.	13	2			*			
				A4.2.2	Develop understanding of the special precautions and procedures necessary during massive transfusions.	13	1		*	*		*	
		A4.3 Recognition and Management of Diabetic Emergencies	D1	A4.3.1	Counsel patient and families to prevent such emergencies.								
					14	2				*	*		
		A4.4 Counsel patients and families with special emphasis on prevention	D1	A4.4.1	Counsel patients and families with special emphasis on prevention.	14	2			*	*		
		A4.5 Pharmacology in Neonatal Intensive Nursing Care	D2	A4.5.1	Discuss the factors affecting medication errors and the strategies to avoid them.	29	1			*	*		
		A4.6 Infection Control and Patient Safety	D2	A4.6.1	Explain infection control and patient safety concepts.	30	1			*	*		
				A4.6.2	Correctly apply infection control principles and guidelines.	30	1			*	*		
				A4.6.3	Correctly perform hand-washing, donning, and gloving, as well as the N95 test.	30	2			*			
				A4.6.4	Compare between hand hygiene and hand scrub.	30	1			*	*		
				A4.6.5	Implement and select the appropriate infection-control modalities, based on a patient's condition.	30	1			*	*		
				A4.6.6	Identify risk factors for neonatal sepsis.	30	1			*	*		
				A4.6.7	Discuss the causes of infection in neonates.	31	1			*	*		
				A4.6.8	Describe modes of transmission of infection in the NICU.	31	1			*	*		
				A4.6.9	Provide effective nursing preventive measures in respect of infectious neonates, based on the source of infection.	31	1			*	*		
				A4.6.10	The trainee must be competent in performing the following nursing procedures: - Hand hygiene;	31	2			*			
				A4.6.11	The trainee must be competent in performing the following nursing procedures: - Donning and Doffing;	31	2			*			
		A4.6.12	The trainee must be competent in performing the following nursing procedures: - N95 test.	31	2			*					
		A4.7 Nursing Leadership and Management	D2	A4.7.1	Apply the principles of quality and risk management to ensure the safety of neonates.	37	1			*	*		
B. Communicator	B1. Verbal	B1.1 Family-Centered Care	D2	B1.1.1	Demonstrate effective communication techniques when interacting with parents and other family members of critically ill neonates, adopting a respectful and appropriate manner, using effective listening, nonverbal, questioning, and narrative skills.	34	2			*			
				B1.1.2	Implement appropriate interventions for families exhibiting anger, aggression, and crisis indicators.	34	2			*			
		B1.2 Nursing Leadership and Management	D2	B1.2.1	Communicate positively with patients' families and other health care workers.	37	2			*			
	B2. Non-verbal	B2.1 Post-Operative Care	D2	B2.1.1	Hand-over patients properly to the appropriate facilities.								
					15	2			*				
		B2.2 Family-Centered Care	D2	B2.2.2	Be alert to nonverbal clues while caring for families.								
					34	3			*				
		B2.3 Nursing Leadership and Management	D2	B2.3.1	Demonstrate leadership and management of a care-giving team comprising individuals with varied cultural backgrounds and varied levels of clinical knowledge and competencies.								
					36	3			*				
		B2.4 Nursing Informatics	D2	B2.4.1	Discuss the evolving models and theories of informatics that define the role and competencies of nursing informatics.								
	35				1			*	*				
	B2.4.2				Identify models of computerized nursing records and their benefits for patient care.	36	1			*	*		
	B2.4.3				Able to integrate nursing informatics into areas of nursing administration, education, clinical practice, and research.	36	1			*	*		
B2.4.4	Implement security regulations to safeguard patients' and organizations' data and information.	36	1			*	*						
C. Collaborator	C1. Nursing Leadership and Management	D2	C1.1	Collaborate with multidisciplinary health care team members in prioritizing and coordinating quality/cost effective healthcare.	36	3							
D. Leader	D1. Safe drug prescribing	D1	D1.1	Discuss the ethical and legal framework governing safe drug prescribing in Saudi Arabia.	13	1		*	*	*			
			D1.2	Promote evidence-based cost-effective prescribing.	13	1,3		*	*	*	*		
	D2. Ethics in Nursing and Care Dimensions	D1	D2.1	Use ethical reasoning to synthesize standards of practice, ethical principles, and legal/regulatory requirements in the resolution of ethical dilemmas.	24	1		*	*	*			
	D3. Infection Control and Patient Safety	D2	D3.1	Demonstrate understanding of infection-control-related policy and procedures in the neonatal unit.	30	1			*	*			

	D4. Ethical issues: transplantation/organ harvesting; withdrawal of care	D1	D4.1	Be familiar with the legal and regulatory guidelines regarding organ transplantation and withdrawal of care.	14	1	*	*	*	*
	D5. Nursing Leadership and Management	D2	D5.1	Utilize the skills of nursing processes, critical thinking, ethical decision-making, communication, and therapeutic nursing intervention in managing culturally competent and cost-effective care of client groups across the wellness/illness continuum.	36	1		*		*
			D5.2	Analyze the components of organizational structure and culture.	36	1		*		*
			D5.3	Apply theories of effective leadership and management within selected health care arenas.	36	1				
			D5.4	Contribute to organizational strategic planning and its implementation at different levels within healthcare organizations.	36	3				
			D5.5	Implement the concepts of leadership and management theories in dealing with patients and health care workers.	37	1		*		*
E. Health Advocate	E1. Patient Advocacy	D1	E1.1	Define patient advocacy.	14	1	*	*	*	*
			E1.2	Recognize patient advocacy as a core value governing medical practice.	14	1	*	*	*	*
			E1.3	Describe the role of patient advocates in the care of patients.	14	1	*	*	*	*
			E1.4	Develop a positive attitude towards patient advocacy.	14	3				
			E1.5	Be a patient advocate in conflicting situations.	14	3				
			E1.6	Be familiar with local and national patient advocacy groups.	14	1	*	*	*	*
	E2. Family-Centered Care	D2	E2.1	Plan and implement health teaching strategies to support and help families to take care of their neonates.	34	1				
F. Scholar	F1. Foundations of Neonatal Nursing	D1	F1.1	By the end of this module, trainees must be competent in the following: - Parents and family education.	17	1,2	*	*	*	*
	F2. Epidemiology	D1	F2.1	Conduct epidemiological study designs (cohort, cross-sectional, retrospective, and prospective).	25	1				
			F2.2	Identify potential biases, confounders, and interacting factors in an epidemiological study.	25	1				
			F2.3	Develop critique of medical and health research studies.	25	1				
	F3. Biostatistics	D1	F3.1	Demonstrate familiarity with statistical terminology and the purpose of statistics.	26	1	*	*		
			F3.2	Identify ways of organizing data.	26	1	*	*		
			F3.3	Recognize measures of central tendency and variability.	26	1	*	*		
			F3.4	Demonstrate understanding of the analysis of statistical data within the research context.	26	1	*	*		
			F3.5	Provide necessary statistical background for analyzing data and drawing inferences from that analysis.	26	1	*	*		
			F3.6	Discuss the logic of hypothesis testing.	26	1	*	*		
			F3.7	Demonstrate understanding of the statistical terminology listed in the module.	26	1	*	*		
			F3.8	Able to organize data competently.	26	1				
			F3.9	Correctly implement the central tendency and variability measures.	26	1				
			F3.10	Analyze data and draw inferences from the analysis.	26	1				
			F3.11	Illustrate the logic of hypothesis testing.	26	1				
	F4. Introduction to Research and Evidence-Based Practice	D2	F4.1	Define the basic concepts of research methodology.	27	1		*		
			F4.2	Differentiate between research designs.	27	1		*		
			F4.3	Describe the scientific process and its use in nursing research.	27	1		*		
			F4.4	Design a research proposal project.	27	1		*		
			F4.5	Explain the steps of the research process in the proposal and/or conduct of a circumscribed nursing research project.	27	1		*		
			F4.6	Identify research problems and the literature review process related to nursing practice.	27	1		*		
			F4.7	Compare and contrast research designs.	27	1		*		
			F4.8	Discuss appropriate statistical techniques in data analysis.	27	1		*		
			F4.9	Critique current studies of nursing practice.	27	1				
			F4.10	Describe the utilization of research findings.	27	1		*		
			F4.11	Define the historical perspective of EBP.	27	1		*		
			F4.12	Define and apply evidence-based nursing practice principles, which are identified through nursing research. Please refer to Appendix 3 for the Nursing Research Project Guidelines.	27	1				
F4.13			Demonstrate understanding of research terminology.	27	1		*			
F4.14			Recognize the differences between the research designs and methodologies.	27	1		*			
F4.15			Correctly conduct a literature review by applying systematic principles.	27	2					
F4.16			Gather and interpret relevant data to make judgments.	27	2					
F4.17	Utilize evidence-based principles in practical applications.	27	1		*		*			

			F4.18	Comprehend the application of a critical appraisal approach.	27	1		*			
			F4.19	Critique journal articles.	27	1					
			F4.20	Formulate a research proposal for a topic of interest within the neonatal intensive care specialty.	27	2					
			F4.21	Design and implement a research project.	27	1					
			F4.22	Compose a manuscript for publication.	27	1					
		F5. Pharmacology in Neonatal Intensive Nursing Care	D2	F5.1	Teach parents about drug preparation and administration of medication before patient discharge.	29	2			*	*
				F5.2	Parents' education related to drug administration.	30	2			*	*
		F6. Nursing Leadership and Management	D2	F6.1	Utilize skills of inquiry and research to enhance one's knowledge base, facilitate change, and improve quality of care.	36	3				
G. Professional		G1. Ethical Issues: transplantation/organ harvesting; withdrawal of care	D1	G1.1	Apply key ethical and religious principles governing organ transplantation and withdrawal of care.	14	1	*	*		*
		G2. Ethical Issues: treatment refusal; patient autonomy	D1	G2.1	Describe the concept of 'rational adult' in the context of patient autonomy and treatment refusal.	14	1	*	*		*
				G2.2	Analyze key ethical, moral, and regulatory dilemmas in treatment refusal.	14	1	*	*		*
				G2.3	Recognize the importance of patient autonomy in the decision-making process.	14	1	*	*		*
		G3. Ethics in Nursing and Care Dimensions	D1	G3.1	Examine the nature and role of ethical theories in guiding sound ethical decision-making in workplace settings.	24	1	*	*		*
				G3.2	Discuss the ethical and legal context of professional nursing practice.	24	1	*	*		*
				G3.3	Examine key ethical issues occurring in nursing and related health care contexts.	24	1	*	*		*
				G3.4	Discuss processes for achieving desired moral outcomes in nursing and healthcare domains.	24	1	*	*		*
				G3.5	Analyze conflicting duties and rights inherent in moral dilemmas.	24	1	*	*		*
				G3.6	Discuss the impact of current issues related to health care delivery.	24	1	*	*		*
				G3.7	Discuss ethical issues relevant to critically ill neonatal patients.	24	1	*	*		*
				G3.8	Demonstrate ability to implement basic ethical principles in neonatal management.	25	1	*	*		*
				G3.9	Demonstrate understanding of the differences between moral and legal concepts in neonatal diagnosis and treatment.	25	1	*	*		*
				G3.10	Able to ethically identify life and death considerations applied in the KSA.	25	1	*	*		*
			G3.11	Able to critically illustrate the common ethical dilemmas related to neonates.	25	1	*	*		*	
		G4. Pharmacology in Neonatal Intensive Nursing Care	D2	G4.1	Describe the nurse's role as regards the ethical and legal issues related to prescribing and administering drugs.	29	1		*		*
		G5. Family-Centered Care	D2	G5.1	Respect family values, attitudes, and beliefs regarding health and illness.	34	3			*	
		G6. Nursing Informatics	D2	G6.1	Apply approaches that safeguard data and information integrity, while maintaining privacy and confidentiality.	35	1		*		*
		G7. Nursing Leadership and Management	D2	G7.1	Demonstrate professional accountability for effective leadership in nursing practice.	36	3				