Ministry of Education

Test Blueprint for National Exit Examination to be held in 2015 E.C

Band: III

Program: Bachelor of Sciences Degree in Neonatal Nursing

Complied By:

Assefa Desalew Fentaw (Assistant Professor of Pediatrics and Child Health Nursing, Haraamaya University)

February 2023

Addis Ababa

Ethiopia

Contents

Contents 2

1. Introduction 3

2. Objective and Significance of Test Blueprint 4

2.1. Objective 4

2.2. Significance of Test Blueprint 4

3. Expected profile of the graduates 5

Competences 5

4. The objective of the program 8

4.1. General Objective 8

4.2. Specific objectives 9

5. Themes and courses to be included in the exit exam 12

6. Share of the Themes/Courses/Items in Percent (%) 13

7. Test blueprint Table (Table of Specification) 14

8. Share of Competencies (KSA) per Courses / Summery/ 19

9. Conclusion 20

1. Introduction

The Ministry of Education in Ethiopia has announced the implementation of exit exams for all undergraduate program students both in public and private higher education starting from the 2015 E.C. To improve the quality of graduates produced in higher learning institutions, the exit exam is essential to check whether students have acquired the minimum required knowledge, skills, and attitudes. Implementing this requires determining competency areas for a specific program, which is already completed. Based on the competency areas prepared, it needs to plan the construction of tests.

Planning a test is the first and vital step in the construction of valid or achievement test items. An achievement test demands systematic and careful planning. Tests are the tools that provide scores to measure the level of student learning and measure the achievement of program learning outcomes. To achieve the valid and reliable measurement of student learning and program learning outcomes, the development of valid and reliable tests is an important milestone. Tests should be able to measure student performance in all dimensions of knowledge, skill, and attitude. The carefully planned test construction contributes to improving the overall quality of the test in terms of test content validity, difficulty level, discrimination power, and test reliability. Test preparation is not an easy task; it requires careful planning and guideline to make the task simple. Test construction requires the preparation of a test blueprint.

A test blueprint is defined as a guide for test item development. The term refers to a map or specification of assessment to ensure that all aspects of the curriculum and educational domains are covered by the assessment programs over a specified period. It helps test items developer to match various competencies with the course content and the appropriate modality of assessment. Generally, a test blueprint will help to ensure tests: 1) Appropriately assess the achievement of instructional objectives; 2) Appropriately reflect key course goals, objectives, and the material learned or covered during the instruction period; and 3) Include the appropriate item formats along with the knowledge and skills being assessed. This test blueprint document is prepared to guide the test developers or content specialists in their process of valid and reliable test construction. The major points considered in the process of

preparing this test blueprint guideline were the core competencies that have been already identified for the themes of courses, the course contents, course credit hours, and the learning outcomes with their corresponding levels of achievement by learning domains. In line with these, the number of test items that should adequately assess the performance of students in all the content topics will be determined through discussion with the content specialists who construct the blueprint and test for their corresponding study program.

2. Objective and Significance of Test Blueprint

2.1. Objective

Test blueprint preparation is generally opted to assist the preparation of test items that is representative, broadly sampled, and consist of the complete knowledge domain expected of Ethiopian higher education students on completion of their study program. The objectives of the test blueprint are to:

- Facilitate the construction of representative and balanced test items for the selected courses following the competencies identified.
- Guide test developers or writers to write or set appropriate test items.

2.2. Significance of Test Blueprint

It is important to set competency areas of the program to measure how much graduates acquired with minimum skills, knowledge, and attitudes. A test blueprint is a three-dimensional chart that shows the placement of each question in respect of the objective and the content area that it tests. The following shows us the significance of the test blueprint;

- Test blueprint used for examination that contains the strategy of the exam by an educational institution;
- A test blueprint will help us plan which questions to include in your exam and ensure that it adequately assesses the learning objectives of the course; and
- It defines the knowledge, skills, and attitude you want to assess and will enable you to build purpose-driven, successful assessments

3. Expected profile of the graduates

In general, the graduate of the bachelor of sciences in Neonatal Nursing program is expected to provide the following activities

- Formulate nursing care plans for individuals, families, and the community, and apply them for the prevention and treatment of neonatal illnesses
- Provide comprehensive care for neonatal health problems based on the nursing framework
- Provide life-saving emergency neonatal nursing care
- Take comprehensive neonatal history and perform a physical examination to reach a relevant nursing diagnosis
- Interprets appropriate laboratory investigations and diagnose neonatal illnesses
- Lead the design, implementation, and monitoring of neonatal health issues
- Develop leadership and organizational management skill
- Develop effective communication and teamwork skills
- Provide compassionate family-centered care by applying moral, ethical, and professional principles and legal responsibilities underlying the nursing profession including documentation and confidentiality
- Promote neonatal health by influencing lifestyle, nutrition, socio-economic and culture
- Advocates for neonates and families at various levels of policy development, implementation, and evaluation
- Utilizes quality improvement principles and incorporates findings into practice
- Address cultural aspects of maternal and newborn health
- Plays a role in developing and supporting a strategic direction of an organization
- Identifies issues and priority areas relating to neonatal nursing practice

Competences

The competency of students will be measured by the national exit examination at the end of accomplishment of neonatal courses focused on students' three domains named cognitive, affective, and psychomotor domains. The details of the competency are presented here below by categorizing knowledge, skills, and attitudes (KAP).

Areas of competency	Expected competencies to be achieved
Knowledge	After completing the Neonatal Nursing program, the graduate will be able to: • Conceptualize appropriate infection prevention and precaution while providing nursing care for the neonate • Understand the nursing process and principles to make decisions related to neonatal health care delivery • Functions following legislation, health standards, and policies pertinent to neonatal health nursing practice • Provide comprehensive outpatient and inpatient care services • Provides guidance and information for the management, informed choice, and consent throughout the course of care delivery • Participates in ethical decision-making within the multidisciplinary team • Protects the neonates from incompetent, unethical, or illegal healthcare practices • Obtains and documents a relevant health history for neonates. • Comprehend the nature and diversity of a range of microorganisms infecting the neonates • Provides care that is directed to achieving health gains/wellness for the neonate using the nursing process and complementary nursing therapies. • Differentiate principles of newborn adaptation to extra-uterine life • Realize thorough health history to include maternal medical, antepartum, intrapartum, and newborn history • Comprehend feeding options (including those born to HIV-positive mothers • Familiarize yourself with elements of health promotion and prevention of disease in newborn • Understand the elements of essential newborn care and neonatal resuscitation • Understand the method of assessing the immediate condition of the newborn (e.g., APGAR scoring) • Understand the importance of immunization needs • Understand harmful traditional practices related problem to the newborn • Identifies etiology, natural history, developmental considerations, pathogenesis, and clinical manifestations of common disease processes in neonates. • Educate mothers and families about danger signs of a newborn, care seeking, and when it occurs • Identify the criteria for admission, re-admission, and safely discharging of the neonate • Considers community and family resources and strengths, when planning patient care and follow-up needs across the continuum of care • Identify the management of common neonatal emergencies and acute health problems • Use a critical inquiry process to support clinical judgment and clinical reasoning in nursing practice • Recognize critical thinking and problem-solving skills to provide health care services • Realize the principles of pain management • Considers community and family resources and strengths, when planning patient care and follow-up needs

Areas of competency	Expected competencies to be achieved
	• Identify therapeutic interventions according to established standards of care • Implements findings from research and quality activities to facilitate improved neonatal health and neonatal health nursing practice. • Provide leadership in clinical care and serves as a role model and preceptor/mentor to colleagues and undergraduate/graduate students • Involves in the leadership and managerial role in a health care system • Educates other professionals and the public about the role of neonatal health • Monitor babies under incubator, radiant warmer, phototherapy…
Skills	• Demonstrates comprehensive clinical skill in neonatal nursing supported by both experience and utilization of updated evidence • Perform screening procedures according to the neonate's age, condition, and reason for contact/visit. • Demonstrate essential newborn care and neonatal resuscitation • Perform a thorough neonatal physical examination to reach a relevant diagnosis • Perform common diagnostic and therapeutic neonatal procedures • Advise mother about health promotion (sunshine exposure, cord care, breastfeeding, immunization, follow-up, avoidance of traditional malpractices • Demonstrates ethically justifiable neonatal health nursing practice following a professional code of ethics. • Demonstrate awareness of own values and beliefs and respect for the rights and beliefs of others recognizes the ethical issues of medical practice and health policy • Apply the skill of fundamental nursing to provide appropriate nursing care for the neonate • Apply components of standard precautions to prevent healthcare-associated infections based on national guidelines • Apply the nursing process while providing nursing care for the neonate • Demonstrate the correct breastfeeding techniques • Apply principles of pain management by using pain management tools • Document the assessment, diagnosis, plan, intervention, and outcomes of care and follow up • Observe babies born from mothers of obstetric problems (APH, multiple pregnancies • Observe babies born from mothers of abnormal labor • Observe and provide care for babies with chromosomal and congenital abnormalities • Approach to sick babies and PMTCT practice • Apply critical thinking, professionalism, and problem-solving skill • Make a clinical decision following professional standards and the scope of practice
Attitudes	• Ability to foster a positive collaborative relationship with others • Demonstrate professional values which include excellence, responsibility, empathy, accountability, honesty and integrity, and a commitment • Show respect for colleagues and other healthcare professionals and the ability to foster a positive

Areas of competency	Expected competencies to be achieved
	collaborative relationship with them • Apply the principles of moral reasoning and decision-making to conflicts within and between ethical, legal, and professional issues • Participates as a member of an interdisciplinary team through the development of collaborative and innovative practices • Support parents during the grieving process, and transport/transfer of newborn • Maintain positive relations with parents while providing care for neonates

4. The objective of the program

4.1. General Objective

The prospective graduates in the Bachelor of Science degree in Neonatal Nursing program are expected to own knowledge, skills, and attitudes to care for and manage common neonatal problems. These are the program objective identified.

- Perform common neonatal procedures
- Assess the growth of the newborn with the growth monitoring chart (Height, weight, Head and chest circumference, and BMI for age)
- Assess and develop a nursing diagnosis for the neonate with common systemic disorders
- Provide nursing care for the neonate with common systemic disorders.
- Monitor neonatal response for treatments and complications of common neonatal disorders.
- Diagnose and manage neonates with common systemic disorders.
- Assess and identify normal pregnancy, and high-risk pregnancy, estimate gestational age using Ballard score, and identify new-born danger signs
- Apply the principles of new-born adaptation to extra-uterine life
- Counsel the mothers about the importance of ANC, PMCT, Breastfeeding, and sunlight exposure.
- Apply moral, ethical principles and legal responsibilities underlying the profession including documentation and confidentiality in the care of the newborn
- Demonstrate professional values which include excellence, responsibility, compassion, empathy, accountability, honesty and integrity, and commitment.
- Apply principles and methods of health promotion and nutrition to improve the health of a population

- Discuss appropriate health promotion measures effective for health problems of public health significance in Ethiopia
- Discuss appropriate health promotion measures effective for health problems of public health significance in Ethiopia
- Distinguish health and nursing organizational setup at various levels.
- Manage health care system (planning, organizing, staffing, directing, and controlling
- Apply economics to the health sector
- Apply basic principles and procedures of health research
- Apply public health methods for the measurement of health and disease in the population
- Analyze epidemiological approach to disease causation with emphasis on infectious diseases.

4.2. Specific objectives

- Assess, measure, and monitor the vital signs of the neonates
- Assess and classify newborns (birth weight and gestational age)
- Measure and interpret the neonatal growth monitoring chart
- Identify neonatal danger signs and manage them accordable
- Apply eye, ear, and other medication instillation
- Assist and follow the endotracheal intubation procedure
- Assist and follow chest tube insertion with control
- Apply wound care, NG tube insertion
- Apply appropriate infection prevention principles and precautions
- Provide essential newborn care
- Provide neonatal resuscitation
- Monitor oxygen, IV fluid, mechanical ventilation, and Endotracheal intubation
- Apply Airway suctioning
- Apply and monitor CPAP
- Apply and monitor baby on phototherapy
- Monitor the mother on infant feeding, immunization, KMC, hygiene, and follow-up...
- Identify relevant symptoms for common neonatal systemic disorders.
- Differentiate the clinical presentations for common neonatal systemic disorders.
- Identify common risk factors for common neonatal systemic disorders.
- Distinguish the pathophysiology of common neonatal disorders
- Interpret common examination findings of the neonate with common systemic disorders.
- Select appropriate nursing diagnosis for common neonatal systemic disorders.
- Recognize expected outcomes of treatments for common neonatal systemic disorders.
- Calculate drug dosages for common medications for common neonatal systemic disorders.
- Identify appropriate nursing interventions for the neonate with common systemic disorders.

- Distinguish complications of common neonate problems
- Identify the body's responses to treatments of the neonate with common systemic disorders.
- Evaluate the outcome of patients after interventions for the neonate with common disorders.
- Diagnose neonates for common neonatal systemic disorders.
- Develop appropriate management for common neonatal systemic disorders.
- Identify relevant symptoms of mothers with risk factors for neonatal problems.
- Analyze maternal risk factors related to common newborn problems
- Estimate the gestational age of the newborn using the Ballard score
- Interpret common physical examination findings of the mother with common risk factors.
- Assess change related to the newborn adaptation to extra-uterine life
- Assess the immediate condition of the newborn (e.g., APGAR scoring)
- Demonstrate various methods of newborn warming, including skin-to-skin
- Advise mother about health promotion (sunshine exposure, cord care, breastfeeding, immunization, follow-up, avoidance of traditional malpractices
- Educate mothers and families about danger signs of a newborn, care seeking…
- Apply proper breastfeeding techniques
- Provide care and support for HIV-exposed newborn
- Counsel the benefits of optimal breastfeeding and feeding options for babies(including those born to HIV positive mother
- Promote immunization needs, and provide appropriate care for HIV exposed
- Identify and apply principles of nursing ethics, standards of practice, and professionalism
- Manage ethical dilemmas, triaging, and liaison
- Produce and maintain accurate documentation of activities, procedures, and results
- Establish and maintain a positive, respectful, and collaborative working relationship with clients, client families, the nursing team, and other working colleagues
- Recognizes the ethical issues of medical practice and health policy
- Advocate for patients and the nursing profession
- Identify nutritional assessment methods at individual and community levels
- Identify stages of communication
- Differentiate the responsibilities of nurses during home visiting
- Differentiate the causes of nutritional deficiencies
- Identify common causes of child mortality and morbidity in Ethiopia
- Identify preventive strategies for nutritional deficiencies in Ethiopia
- Apply different levels of disease prevention
- Apply appropriate models in health education
- Evaluate the consequences of nutritional deficiencies
- Distinguish nursing organizational setup at various levels.
- Identify the role of the nurse manager
- Apply management process in nursing

- Lead nursing team
- Analyze nursing service quality audits
- Create a safe and comfortable environment for clients and staff
- Create a proper care delivery approach in the nursing unit
- Identify and apply principles of management
- Identify the characteristics of a good planning
- Identify characteristics of effective delegation
- Apply conflict management strategies
- Develop characteristics of leadership
- Identify components of the current healthcare tiere system in Ethiopia
- Identify and type steps of evaluation
- Explain the skills and roles of management
- Differentiate activities during human resource management
- Differentiate between conflicts management and resolution
- Apply monitoring and evaluation
- Identify the main sources of healthcare financing in Ethiopia
- Identify the benefits of health care insurance
- Describe the different types of research
- Outline different types of data collection methods
- Develop research objectives
- Analyze ethical issues in research processes
- Develop a research proposal
- Describe how to utilize research findings for evidence-based nursing practices.
- Develop research proposal
- Analyze and interpret data, and report research findings
- Distinguish epidemiological approach to disease causation with emphasis on infectious diseases
- Differentiate the different types of epidemiologic studies design and sampling techniques
- Describe the processes, uses, and evaluation of public health surveillance
- Apply the steps of an outbreak investigation and management
- Apply basic biostatistics concepts, tools, and methods
- Calculate and interpret measures of morbidity and mortality including from existing data sources
- Discuss the epidemiology of diseases of public health significance in Ethiopia and locally

5. Themes and courses to be included in the exit exam

The identified Competency focus areas and core courses document to the Bachelor of Science degree in Neonatal Nursing program have five themes and 13 courses. The selected themes and

courses in the Bachelor of Science degree in Neonatal Nursing program are presented in (**Table 1**)

Table 1: Distribution of themes and courses to be included in the exit examination, Feb 2023

R.No.	Themes	Lists of selected courses	Cr Hours	Remark
	Clinical Neonatal care	Neonatal Nursing I	8	
		Neonatal Nursing II	11	
		Neonatal Nursing III	8	
		Newborn care (Maternity Nursing)	7	
		Foundation of Neonatal Nursing	6	
2	Professionalism	Foundation of Neonatal Nursing (Professional ethics)	2	
3	Health promotion and Disease Prevention	Health education	3	
		Nutrition in health and illness		
4	Leadership and management	Nursing leadership and administration	3	
		Health service management		
		Health economics		
5	Scholar	Research Methodology	4	
		Measurement of health & disease (Biostatistics and Epidemiology)		
Total			52	

Total credit hour of the selected courses

The courses identified in the competency focus area to the Bachelor of Science degree in Neonatal Nursing program have 52 credit hours total.

6. Share of the Themes/Courses/Items in Percent (%)

Table 2: distribution and share of the themes, courses, items, learning outcomes, and KSAs in percent, Feb 2023.

Themes (%)	**Course Name**	**Learning**	**Cr. Hrs**	**Weight of course or proportion**	**Number of test items in % from each course**	**Cognitive**						**Affective**	**Psychomotor**	**Total**
						Remem.	**Underst.**	**Apply**	**Analyze**	**Evaluate**	**Create**			
Clinical Neonatal care (76%)	Foundation of Neonatal Nursing		6	6/40=0.15	0.15*76=11.4	-	1	4	0.5	0.5	-	1	4.4	11.4
	Neonatal Nursing I, II, III		27	27/40=0.675	0.675*76=51.3	2.6	5.2	10.2	5.2	7.5	5.2	5.2	10.2	51.3
	Newborn care (Maternity Nursing)		7	7/40=0175	0.175*76= 13.3	1	1	4.5	1	1	-	1.3	3.5	13.3
	Theme one total credit		40											
Professionalism (4%)	Foundation of Neonatal Nursing (Professional ethics)		2	2/2=1	1*4=4	-	0.7	0.7	-	-	0.6	2	-	4
	Theme two total credit		2											
Health promotion and Disease Prevention (6%)	Health education		1	1/3=0.33	0.33*6=2	-	1	-	0.5	-	-	-	0.5	2
	Nutrition in health and illness		2	2/3=0.67	0.67*6=4	0.5	-	1	-	0.5	-	-	-	2
	Theme three total credit		3											
Leadership and management (6%)	Nursing leadership and administration		1	½=0.5	0.5*6=3	-	-	1	0.5	0.5	05	-	0.5	3
	Health service management		0.5	¼=0.25	0.25*6=1.5	-	0.5	0.5	0.5	-	-	-	0.5	2
	Health economics		0.5	¼=0.25	0.25*6=1.5	1	-	-	-	-	-	-	-	1
	Theme four total credit		**2**											
Scholar (8%)	Research Methodology		2	2/4=0.5	0.5*8=4	-	0.5	0.5	2	-	-	-	1	4
	Measurement of health & disease (Biostatistics and Epidemiology)		2	2/4=0.5	0.5*8=4	-	1	1	1	-	-	0.5	0.5	4
	Theme five total credit		**4**											

			100									100

7. Test blueprint Table (Table of Specification)

Table 3: Higher Education Sub-sector Test Blueprint (Table Specification) for BSc in Post basic Neonatal Nursing

Themes and their share	Name and Share of the Courses (%)	ECTS /Credit hour	General Objective	Process	Specific objectives /learning outcomes	Learning outcomes								
						Cognitive								
						Remembering	Understanding	Application	Analysis	Evaluation	Creating	Affective	Psychomotor	No of Items (%)

Clinical Neonatal care (76%)	Foundation of Neonatal Nursing (11.4%)	11/6	Perform the common neonatal procedure Assess the growth of the newborn with growth monitoring chart (Height, weight, Head and chest circumference, and BMI for age)	Assessment Intervention Evaluation Evaluation	Assess, measure, and monitor the vital signs of the neonates Assess and classify newborns (birth weight and gestational age) Measure and interpret the growth monitoring chart (Height, weight, Head and chest circumference, and BMI for age) Identify neonatal danger signs and manage them accordable Apply eye, ear, and other medication instillation Assist and follow the Endotracheal intubation procedure Assist and follow chest tube insertion with control Apply wound care, NG tube insertion Apply appropriate infection prevention principles and precautions while providing nursing care Provide essential newborn care Provide neonatal resuscitation Monitor oxygen, IV fluid, mechanical ventilation, and Endotracheal intubation Apply Airway suctioning Apply and monitor CPAP Apply and monitor baby on phototherapy Monitor the mother on infant feeding, immunization, KMC, hygiene, and follow-up...	-	1	4	0.5	0.5	-	1	4.4	11.4

	Neonatal Nursing I, Neonatal Nursing II, Neonatal Nursing III (51.3%)	45/27	Assess and develop a nursing diagnosis for the neonate with common systemic disorders. Provide nursing care for the neonate with common systemic disorders. Monitor neonatal response for treatments and complications of common neonatal disorders.	Assessment Diagnosis Planning Intervention Evaluation	Identify relevant symptoms for common neonatal systemic disorders. Differentiate the clinical presentations for common neonatal systemic disorders. Identify common risk factors for common neonatal systemic disorders. Distinguish the pathophysiology of common neonatal disorders Interpret common physical examination findings of the neonate with common systemic disorders. Select appropriate nursing diagnosis for common neonatal systemic disorders. Recognize expected outcomes of treatments for common neonatal systemic disorders. Calculate drug dosages for common medications for common neonatal systemic disorders. Identify appropriate nursing interventions for the neonate with common systemic disorders. Distinguish complications of common neonate problems Identify the body's responses to treatments of the neonate with common systemic disorders. Evaluate the outcome of patients after interventions for the neonate with common disorders.	2.6	5.2	10.2	5.2	7.5	5.2	5.2	10.2	51.3
			Diagnose and manage neonates with common systemic disorders.	Diagnosis Management	Diagnose neonates for common neonatal systemic disorders. Develop appropriate management for common neonatal systemic disorders.									

Professionalism (4%)	Foundation of Neonatal Nursing (Professional ethics and growth and development) (4%)	3/2	Apply moral, ethical principles and legal responsibilities underlying the profession including documentation Demonstrate professional values with excellence in responsibility, empathy, accountability, honesty, and integrity	Intervention	Identify and apply principles of nursing ethics, standards of practice, and professionalism Manage ethical dilemmas, triaging, and liaison Produce and maintain accurate documentation of activities, procedures, and results Establish and maintain a positive, respectful, and collaborative working relationship with clients, client families, the nursing team, and other working colleagues Recognizes the ethical issues of medical practice and health policy Advocate for patients and the nursing profession	-	0.7	0.7	-	-	0.6	2	-	4
Health promotion and Disease Prevention (6%)	Health education 2%	5/3	Apply principles and methods of health promotion and nutrition to improve the health of a population	Assessment	Identify nutritional assessment methods at individual and community levels Identify stages of communication Differentiate the responsibilities of nurses during home visiting Differentiate the causes of nutritional deficiencies Identify common causes of child mortality and morbidity in Ethiopia	-	1	-	0.5	-	-	-	0.5	2
	Nutrition in health and illness (4%)		Discuss health promotion measures effective for health problems of public health significance in Ethiopia	Intervention	Identify preventive strategies for nutritional deficiencies in Ethiopia Apply different levels of disease prevention Apply appropriate models in health education Evaluate the consequences of nutritional deficiencies	0.5	-	1	-	0.5	-	-	-	2

Leadership and management (6%)	Nursing leadership and administration (3%)	3/2	Distinguish health and nursing organizational setup at various levels.	Intervention	Distinguish nursing organizational setup at various levels. Identify the role of the nurse manager Apply management process in nursing Lead nursing team Analyze nursing service quality audits Create a safe and comfortable environment for clients and staff Create a proper care delivery approach in the nursing unit	-	-	1	0.5	0.5	05	-	0.5	3
	Health service management (2%)		Manage health care system (planning, organizing, staffing, directing, and controlling		Identify and apply principles of management Identify the characteristics of a good planning Identify characteristics of effective delegation Identify conflict management strategies Identify characteristics of leadership Identify components of the current healthcare tiere system in Ethiopia Identify and type steps of evaluation Explain the skills and roles of management Differentiate activities during human resource management Differentiate between conflicts management and resolution Apply monitoring and evaluation	-	0.5	0.5	0.5	-	-	-	0.5	2
	Health economics (1%)		Apply economics to the health sector		Identify the main sources of healthcare financing in Ethiopia Identify the benefits of health care insurance	1	-	-	-	-	-	-	-	1

Scholar (8%)	Research methodology (4%)	3/2	Apply basic principles and procedures of health research		Describe the different types of research Outline different types of data collection methods Develop research objectives Analyse ethical issues in research processes Develop a research proposal Describe how to utilize research findings for evidence-based nursing practices. Develop research proposal Analyse and interpret data, and report research findings	-	0.5	0.5	2	-	-	-	1	4
	Measurement of health & disease (Biostatistics and Epidemiology) (4%)	4/2	Analyse epidemiological approach to disease causation with emphasis on infectious diseases.		Distinguish epidemiological approach to disease causation with emphasis on infectious diseases Differentiate the different types of epidemiologic studies design and sampling techniques Describe the processes, uses, and evaluation of public health surveillance Apply the steps of an outbreak investigation and management Apply basic biostatistics concepts, tools, and methods Calculate and interpret measures of morbidity and mortality including from existing data sources Discuss the epidemiology of diseases of public health significance in Ethiopia	-	1	1	1	-	-	0.5	0.5	4
Total Number of Items in %														100

8. Share of Competencies (KSA) per Courses / Summery/

The shares of each course from the weight or share of the theme (%), the share of items per course, and the share of items per competency (KSAs-Knowledge, Skill, and Attitude items) are calculated as follow and the results are presented in **(Table 4)**.

- The share of each course per theme (%) = $\frac{Credit\ hour\ of\ the\ course}{Credit\ hour\ of\ the\ theme} x\ 100$
- The share of items per course (%) = Share of the course in a theme X share of the Theme
- Share of items per competency (KSAs-Knowledge, Skill, and Attitude items) is the sum of the ratio or proportion of items dedicated to cognitive, psychomotor, and affective domains

Table 4: Summary Table for competencies share (KSA) per Courses for Post-basic Neonatal Nursing_

R. No.	Themes	Course Name	Cr Hours	Courses Share (%)	Share of Competencies (in %)			Remark
					Knowledge	**Skill**	**Attitude**	
1	Clinical Neonatal care	Foundation of Neonatal Nursing	6	11.4	6	4.4	1	
		Neonatal Nursing I, II, III	27	51.3	39.9	10.2	5.2	
		Newborn care (Maternity Nursing)	7	13.3	8.5	3.5	1.3	
2	Professionalism	Foundation of Neonatal Nursing (Professional ethics)	2	4	2	-	2	
3	Health promotion and Disease Prevention	Health education	1	3	1.5	0.5	1	
		Nutrition in health and illness	2	3	2	-	-	
4	Leadership and management	Nursing leadership and administration	1	3	2.5	0.5	-	
		Health service management	0.5	2	1.5	0.5	-	
		Health economics	0.5	1	1	-	-	
6	Scholar	Research Methodology	2	4	3	3	-	
		Measurement of health & disease (Biostatistics and Epidemiology)	2	4	3	0.5	0.5	
		Total	**52**	**100**	**65.9**	**23.1**	**11**	

9. Conclusion

Exit examination can have a vital role in producing knowledgeable, skillful, and attitudinally mature graduates. It contributes to preparing competent graduates as it can serve as a quality check for effectiveness. It also helps in improving academic programs' quality and effectiveness. Furthermore, it can create a platform for cooperation among academic programs at different universities to work jointly to improve the program's quality.

Because of this, this document is produced to assist in the setting of the exit examinations for Post basic Neonatal Nursing program, which is being delivered by the Ministry of Education. To meet the graduation profile, competency, and learning outcome, exit exam competency selection and identifying core course was carried out for 2015 EC graduating students. As a result, preparing a test blueprint is necessary to prepare for guiding the test item developer and ensure the proper distribution of items based on the courses and competencies.