

# **Diploma Programme in Nursing Science and Midwifery**

## **Curriculum Title**

Diploma in Nursing Science and Midwifery (2006)

## **Degree Awarded**

Diploma in Nursing Science and Midwifery

## **Background**

Special effort was made to assess the quality of the nursing education in Bangladesh, particularly Senior Registered Nurse (SRN) Curriculum, which was revised in 1989 and has been implemented since 1991. Several studies were also carried out to examine quality of nursing education as well as the practice of nursing care in hospitals.<sup>1,2,3</sup>

These studies revealed that the existing SRN curriculum did not meet the goal to prepare client- and community-oriented nurses. Moreover, there was the discrepancy between what was taught in the nursing institutes and what was practiced in the hospital.

In addition, there are several changes in health care system as well as emerging health issues and changing health care needs in Bangladesh in the past decade. Nursing education must be responsive to these changes

In light of the above concerns, it is imperative that the existing SRN curriculum that has been used for over 10 years needs to be revised in order to prepare competent and committed nurses responsive to ever-changing health service needs of the country. Also, decision was made that nurses in Bangladesh should be educated at bachelor's degree, comparable to neighboring countries and as per international standards. However, presently it is impossible to offer bachelor programme at nursing institutes because of a limited capacity of teachers and learning facilities. It was decided that nursing institutes should offer the diploma programme, considered as a stepping-stone, while striving to build up their capacity for implementing the bachelor programme in the future.

The current SRN curriculum was therefore revised, with technical assistance from the World Health Organization, Bangladesh. Taking into account of national policies as well as outcomes of various studies and major stakeholders' meetings, major changes in the SRN curriculum, which is now called Diploma in Nursing Science and Midwifery (2006), are as follows:

1. The curriculum framework is presented to guide the curriculum design. It reflects philosophical beliefs of the Bangladesh Nursing Council and its members in preparing competent nurses to meet the need of national health care system.

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<sup>1</sup> Hadley, M & Thanki, M. (2002). Making choices fro nurse training and education.

<sup>2</sup> Hadley et al. (2003). Why nurses avoid providing direct patient care.

<sup>3</sup> Khatun, T & Begum, T. (2003). A study to find the activities performed by the ward in-charge to ensure the basic nursing care to the patient in selected government and private hospital.

2. The curriculum is designed to (1) be dynamic and responsive to changing health care needs, policy and delivery system in Bangladesh, (2) integrate concepts considered core to nursing, (3) increase learning ability through sequencing courses from simple to complex and building on prior learning, and (4) increase students' competencies overtime throughout the curriculum (5) change the academic year from 4 years to 3 years.
3. Concepts of human behaviors as they relate to the role of the professional nurse with clients and other health care professionals as well as importance of effective interpersonal communication with individuals, families, and groups in order to develop caring relationship are emphasized in various courses.
4. Midwifery is incorporated in the curriculum so that both female and male students are capable to provide basic midwifery to help addressing maternal and newborn health problems in the country.
5. New courses relevant to nursing care that are congruent with philosophical beliefs of the Bangladesh nursing community are offered.
6. Courses in the old curriculum are reorganized, renamed and updated.
7. Educational credit system is instituted. Classroom study, laboratory, and practice hours are allocated in accordance with number of course credits.
8. Academic semester is introduced so that the sequence of courses can be practically constructed.
9. The focus on community-oriented nursing offers students opportunities to learn to provide care to individuals and families taking into account their community contexts. With this approach, students will practice community-oriented nursing in both hospital and community settings.
10. Using nursing process to assess and identify clients' needs/expectation and responses to actual or potential health problems is emphasized. A course, health assessment across the life span is offered to increase students' ability in problem-solving and clinical judgment skills.
11. Positive attitudes towards nursing practice and the nursing profession; ethical behaviors; ethical and legal issues are addressed throughout the curriculum.
12. Teaching-learning strategies used to enhance students' directed learning and critical thinking are recommended in the course syllabus with an emphasis on improving students' competencies.
13. Effective continuous student assessment system for both theoretical and practical component is instituted at the nursing institute level to monitor student's progression and improvement over time. The Bangladesh Nursing Council (BNC) comprehensive examination is now conducted at the end of the program for certification and issuing license to practice.
14. Entry qualification has been raised to 12<sup>th</sup> grade certificate holders (Higher Secondary Certificate or HSC). This change is essential to increase the competency of students enrolled in the program so that quality of basic nursing education can be substantially improved as well as enabling students to be eligible for higher education (post-basic bachelor and graduate study) in the future.

## **Philosophy**

The Bangladesh Nursing Council and its members hold the following beliefs about person, environment, health, nursing, midwifery, and nursing education.

**Person** is a unique being, holistic in nature with interactive bio-physical, psycho-social, and spiritual dimensions. A person has ability for self-care actions required for promoting health, preventing diseases and illnesses, overcoming illness/restoring and maintaining health.

**Environment** consists of bio-physical and socio-cultural elements that impact people's health. Each person lives within, and interacts with, an ever-changing environment, including health-care environment. The environment can be altered to positively affect a person's health by changing or removing unhealthy stressors and providing health-promoting resources.

**Health** is a state of complete physical, mental, social and spiritual well-being, and not merely the absence of disease or infirmity. Health-illness continuum indicates a continuum stage between health and illness across life span. Health is viewed as a dynamic state of wholeness or integrity achieved by continual adjusting one's self for optimal functioning. Illness is viewed as a dynamic state of loss of wholeness, dysfunction, or disorganization. While healing is the process through which illness is overcome and wellness reestablished; and is achieved by goal-oriented or deliberated actions.

**Nursing** assists clients (individuals, families and communities-aggregates of people within communities) to attain physical, mental, social and spiritual well-being. Nursing involves a dynamic interaction between client and nurse aimed to promote, maintain, and restore optimal health in collaboration with other health team members. It also encourages involvement of clients and significant others in the care for self-reliance and in modifying their health behaviors. Nurses use nursing process in determining clients' needs or problems in responses to actual or potential health problems, planning for nursing interventions, intervening, and evaluating responses. Nurses deliver community-oriented nursing care, taking into account clients' community context. Critical thinking is the basis for nurses to apply nursing knowledge and to follow ethical and legal framework in their practice.

**Midwifery** is care of the girl-child, the adolescent and the adult woman prior to, during, and following pregnancy. It aims to promote, maintain, and restore optimal health and views pregnancy as a normal life event. Midwife gives necessary supervision, care and advice for women during pregnancy, labour and the postpartum period. The midwife conducts deliveries on her own responsibility and cares for the newborn infant. She detects abnormal conditions in the mother and baby, procures medical assistance as necessary; and the execution of emergency measures in the absence of medical help. The midwife works in collaboration with other health care team members and/or community-based health workers in promoting the health of women and childbearing families.

**Nursing education** is a dynamic, continuous learning process of acquiring nursing and midwifery knowledge and skills that bring about changes of student behaviors. Nursing education acquires active and life-long learning and new learning builds on previous knowledge and experience. Learning in nursing education is best achieved when student is motivated and ready to learn, where student's dignity is respected; teaching strategies and learning experiences are carefully selected to facilitate critical thinking; and professional or clinical role modeling is offered.

## Goal

Student who completes the Diploma programme will be a competent nurse-midwife who can demonstrate the competency of using knowledge-based practice for provision of quality holistic client-centered nursing care to meet needs/expectations and to promote, maintain, and restore health of individuals, families, and communities in common and simple health problems/ situations.

## Objective

The objective of this program is to develop a registered nurse-midwife who will be able to:

1. Demonstrate to have knowledge in:
  - 1.1 Basic sciences, applied sciences, and human sciences;
  - 1.2 Nursing science focusing on interpersonal communication, nursing process, holistic nursing, community-oriented nursing, and knowledge requiring for making clinical nursing judgment in common and simple health problems/situations of nursing clients across the life-span and across health-illness continuum;
  - 1.3 Nursing leadership and management;
  - 1.4 National health care policy;
  - 1.5 Emerging local and global health issues;
  - 1.6 Basic research and evidence-based nursing;
  - 1.7 Basic self-inquiry and computer
2. Demonstrate to have skills in:
  - 2.1 Using nursing process with knowledge-based clinical skills and critical thinking skills in caring for clients with common and simple health problems/situations across the life-span and across health-illness continuum in order to promote, maintain, and restore health;
  - 2.2 Providing client-centered and holistic care with caring behaviors;
  - 2.3 Carrying out knowledge-based and community-oriented nursing practice with positive attitudes, ethical behaviors and accountability in accordance with the BNC rules and regulations and professional standards;
  - 2.4 Communicating effectively with nursing clients, nursing members, physicians, and other health care providers;
  - 2.5 Working collaboratively in a health care team and as a member or a novice leader of the nursing care team;
  - 2.6 Managing own work on a day-to-day basis;
  - 2.7 Guiding and fostering good clinical environment to nursing students and other support staff who work under nursing supervision; and
  - 2.8 Thinking critically and committing to self-directed learning
3. Appreciate oneself as a nurse-midwife, and have positive attitudes toward professional nursing and lifelong learning.

## Framework

The curriculum is designed to offer a sequence of learning experiences, from simple to complex. The curriculum framework (Figure 1) incorporates common and simple situations significant to nursing in dealing with health of individuals, families, and communities within the health-illness continuum and throughout human developmental stages (from newborn to elders, including pregnancy) for achieving nursing goals (promoting, maintaining and restoring health). Essential competencies required for quality nursing and midwifery care are integrated throughout the curriculum. These include competencies in:

- (1) Using nursing process in common and simple health problems/situations with the considerations of client-centered, holistic, community-oriented, and knowledge-based nursing;
- (2) Carrying out ethical behaviors and concerning ethical and legal issues;
- (3) Developing management and leadership skills;
- (4) Developing self-directed and life-long learning skills.

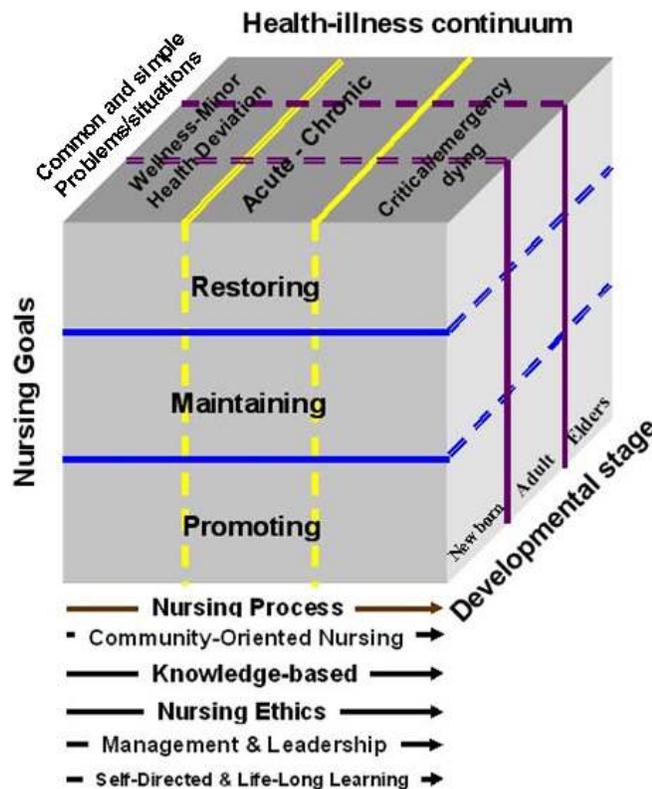


Figure 1. Curriculum Framework of the Diploma Programme in Nursing Science and Midwifery

## Curriculum Design

The curriculum is dynamic with provision for incorporating emerging health problems and changing health policies as well as latest advancement in health sciences. It is designed to incorporate (1) general education courses to prepare students to understand the world, understand human behaviors and well-behave in the society, and be able to communicate in English, (2) foundation courses to furnish students with essential knowledge relevant to nursing and midwifery, and (3) professional courses for nursing and midwifery specific

courses. The courses are sequenced from year one to year three, from simple to complex, with an attempt to increase students' competencies overtime.

### Curriculum Structure

Total credits = 110 semester credits

Numbers in the parenthesis indicate total classroom study hours, hours in laboratory and/or clinical practice hours in a semester.

Numbers are assigned as the followings:

1 credit for classroom study is equal to 16 hours per semester

1 credit for laboratory is equal to 32 hours per semester

1 credit for clinical practice is equal to 96 hours per semester.

One semester is equal to 18 weeks with one week for midterm exam and another week for final exam. Between semesters, there will be school break for a minimum of 4 weeks which will allow time for students who fail a course to take re-exam, or to do additional study/assignment/practice to improve their academic performance in order to fulfill the requirement of the course.

#### 1. General Courses

Course Number*	Credits (study**/lab/practice)
D111: Social Science	2 (32/0/0)
D112: Psychology of Human Behaviors	2 (32/0/0)
D113: Chemistry and Physics	3 (40/16/0)
D114: General Biology	2 (32/0/0)
D115: English I	3 (32/32/0)
D211: English II	3 (32/32/0)
D311: English III	3 (32/32/0)
D116: Introduction to Computers	1 (16/0/0)
<b>Total credits</b>	<b>19(248/112/0)</b>
<b>Total hours</b>	<b>360</b>

#### 2. Specific Courses

##### 2.1 Foundation Courses

D121: Communication in Nursing	2 (16/32/0)
D122: Anatomy and Physiology	6 (80/32/0)
D123: Microbiology and Parasitology	3 (40/16/0)
D124: Nutrition and Nutritional Support	3 (40/16/0)
D125: Pathophysiology	3 (48/0/0)
D126: Biostatistics and Epidemiology	2 (32/0/0)
D221: Pharmacology	3 (48/0/0)
<b>Total credits</b>	<b>22 (304/96/0)</b>
<b>Total hours</b>	<b>400</b>

Course Number	Credits (study/lab/practice)
<b>2.2 Professional Courses</b>	
D131: Introduction and Conceptual Bases of Nursing	3 (48/0/0)
D132: Introduction to Health Assessment	2 (24/16/0)
D133: Fundamental of Nursing	6 (48/32/192)
D134: Introduction to Nursing Inquiry	1 (16/0/0)

D135: Community Health Nursing I	2 (32/0/0)
D231: Community Health Nursing II: Individual and Basis of Family Health	3 (32/0/96)
D236: Community Health Nursing III: Basis of Community Health	3 (32/0/96)
D232: Adult Nursing I	3 (24/0/144)
D233: Adult Nursing II	3 (24/0/144)
D331: Adult Nursing III	6 (48/0/288)
D234: Orthopedic Nursing	4 (32/0/192)
D235: Pediatric Nursing	5 (48/0/192)
D237: Basis of Gerontological Nursing	2 (16/0/96)
D238: Mental Health and Introduction to Psychiatric Nursing	2 (16/0/96)
D332: Midwifery I	8 (64/0/384)
D333: Midwifery II	8 (64/0/384)
D334: Leadership and Management	2 (16/0/96)
D335: Nursing of Newborns	2 (32/0/0)
D336: Research and Evidence-Based Nursing	1 (16/0/0)
D337: Nurse Internship	3 (0/0/288)

**Total credits 69(632/48/2688)**  
**Total hours 3368**

**Total Program credits 110 (1184/256/2688)**  
**Total Programme hours 4128**

\*Course Number: A course number is assigned based on the following indication. D stands for Diploma Programme. First number indicates the year of study. Second number indicates whether the course is general (1), foundation (2), or professional course (3). Third number indicates chronological order of the course. For examples, the course D111 Social Science entails that this course is studied in year 1, is a general course, and is the first course of year 1; the course D333 Midwifery II is studied in year 3, is a professional course, and is in order number 3 of year 3.

\*\*Study refers to classroom study hours.

**Study Plan****Year 1**

Semester 1		Semester 2	
D111: Social Science	2(32/0/0)	D123: Microbiology	3(40/16/0)
D112: Psychology of Human Behaviors	2(32/0/0)	D124: Nutrition and Nutritional Support	3(40/16/0)
D113: Chemistry and Physics	3(40/16/0)	D125: Pathophysiology	3(48/0/0)
D114: General Biology	2(32/0/0)	D126: Biostatistics& Epidemiology	2(32/0/0)
D115: English I	3(32/32/0)	D132: Introduction to Health Assessment	2(16/32/0)
D116: Introduction to Computers	1(16/0/0)	D133: Fundamental of Nursing	6(48/32/192)
D121: Communication in Nursing	2(16/32/0)	D134: Introduction to Nursing Inquiry	1(16/0/0)
D122: Anatomy & Physiology	6(80/32/0)	D135: Community Health Nursing I	2(32/0/0)
D131: Introduction and Conceptual Bases of Nursing	3(48/0/0)		
<b>Total Credits</b>	<b>24(328/112/0)</b>	<b>Total Credits</b>	<b>22(280/80/192)</b>
<b>Total hours</b>	<b>440</b>	<b>Total hours</b>	<b>552</b>

\* D114: General Biology should be arranged within the first month of the semester (8 hours/week) before students are enrolled in D122: Anatomy and Physiology which will start on the second month of the semester (8 hours/week).

**Year 2**

Semester 1		Semester 2	
D211: English II	3(32/32/0)	D233: Adult Nursing II	3(24/0/144)
D221: Pharmacology	3(48/0/0)	D235: Pediatric Nursing	5(48/0/192)
D231: Community Health Nursing II: Individual & Basis of Family Health	3(32/0/96)	D236: Community Health Nursing III: Basis of Community Health	3(32/0/96)
D232: Adult Nursing I	3(24/0/144)	D237: Basis of Gerontological Nursing	2(16/0/96)
D234: Orthopedic Nursing	4(32/0/192)	D238: Mental Health and Intro. Psychiatric Nursing	2(16/0/96)
<b>Total Credits</b>	<b>16(168/32/432)</b>	<b>Total Credits</b>	<b>15(136/0/624)</b>
<b>Total hours</b>	<b>632</b>	<b>Total hours</b>	<b>760</b>

**Year 3**

Semester 1		Semester 2	
D311: English III	3(32/32/0)	D333: Midwifery II	8(64/0/384)
D331: Adult Nursing III	6(48/0/288)	D334: Leadership and Management	2(16/0/96)
D332: Midwifery I	8(64/0/384)	D335: Nursing of Newborns	2(32/0/0)
		D336: Research and Evidence-Based Nursing	1(16/0/0)
		D337: Nurse Internship	3(0/0/288)

<b>Total Credits</b>	<b>17(144/32/672)</b>	<b>Total Credits</b>	<b>16(128/0/768)</b>
<b>Total hours</b>	<b>848</b>	<b>Total hours</b>	<b>896</b>

### **Duration of Training**

There should be a minimum period of three years of education. A student must pass the prescribed pre-requisite course(s), if any, to be able to study in a specific higher level course. At the end of the program, the student is required to take the BNC comprehensive examination for certification and licensing as a registered nurse.

### **Medium of Instruction**

English language is used as a medium of instruction with supplemental Bangla language, as necessary.

### **Admission of Students**

Applicants who meet the following criteria will be eligible to enter to the program:

1. Bangladesh citizenship;
2. Age > 18 years old according to original birth certificate, special affidavit for age certification will not be accepted;
3. Higher secondary certificate (12<sup>th</sup> grade), science track preferable;
4. GPA  $\geq$  2.50
5. Single; and
6. Medical certificate indicates healthy and physical fitness.

### **Method of Recruitment**

1. Written examination conducted by the Directorate of Nursing Services (DNS)
2. Two letters of reference, one from the Local Union Parishad Chairman and one from head of the educational institute

### **Evaluation**

For each course a student will be evaluated at the institutional level using a grading system. Grade A, B, C, D, or F is assigned to reflect student's academic achievement with the following descriptions and weights:

<b>Grade</b>	<b>Description</b>	<b>Weight</b>
A	Excellent (80.00-100%)	4
B	Good (70.00-79.99%)	3
C	Fair (60.00-69.99%)	2
D	Weak (50.00-59.99%)	1
F	Fail (<49.99%)	0

The assigned grade of each course will be calculated to a grade point average (GPA) at the end of each semester (see Annex).

A student will be able to move from one semester to the next if she/he passes relevant courses indicated as prerequisite to those specific courses in the following semester. The following procedures are applied for those who fail:

1. The student who fails any parts of the course(s) (earns less than 50%) will:

1.1 have a second chance to retake the examination and/or do additional assignment(s) relevant to areas of students' weakness for a class room study part.

1.2 have to make up their clinical practice to meet the requirements of the course(s) or do additional assignment(s) for laboratory part.

Once the objectives and requirements of the course(s) are met, the student will receive a grade of such course(s) no greater than "C" (or no greater than 69.99%).

2. For those students who can not achieve procedure 1.1 and/or 1.2, they will receive a grade "F" and have to retake that specific course(s) in the following year. If the failed course is stated as a prerequisite to other courses she/he will not be eligible to register and study in those following courses.

### **Graduation**

Students will be graduated if they meet the following criteria:

1. Pass and complete the requirements of all courses including the clinical experience specified in the checklist book

2. Earn a GPA of  $\geq 2.00$

### **Certification and Licensure**

At the end of the three-year program students must pass the BNC comprehensive examination to receive the Diploma in Nursing Science and Midwifery and to be certified as a registered nurse-midwife.

### **Course Descriptions**

#### **D111: Social Science 2(32/0/0)**

Prerequisite: -

Boundaries and social matters; relationship between social science and other sciences; the influence of social structure including political and economic aspects on health care system; culture embedding in society including values, beliefs, and practices of human behaviors; social change and Bangladesh culture and its influence on health within Bangladesh community.

#### **D112: Psychology of Human Behaviors 2(32/0/0)**

Prerequisite: -

Definition; selected psychological theories including biological theories, behavioral theories, social learning theory, stress-coping theories; motivation; personality; and developmental psychology across lifespan.

#### **D113: Chemistry and Physics 3(40/16/0)**

Prerequisite: -

Introduction to general chemistry including basic concepts about matter, atomic structure, chemical bonds, gases, liquid, and solids, solutions, chemical reactions, acid, bases, and salt; organic and biochemistry including hydrocarbons and their derivatives, carbohydrates, lipids,

proteins, enzymes, vitamins, and minerals, nucleic acids,; principles of physics and applications to nursing including gravity and mechanics, pressure, heat and electricity; nuclear chemistry and nuclear physics, effects of radiation on human beings, and protection and disposal.

**D114: General Biology** **2(32/0/0)**

Prerequisite: -

Introduction to fundamental concepts in the biological science including the organization and common characteristics of living matter, cell structures and functions, food production by photosynthesis, harvesting energy, mechanisms of cell reproduction, genetics, evolutions, and human biology.

**D115: English I** **3(32/32/0)**

Prerequisite: -

Basic grammatical structures of English and basic semantics, that is, how small changes in structure can affect the meaning of sentences; basic reading and listening techniques for constructing informal written essays; and spoken English in daily life.

**D116: Introduction to Computers** **1(16/0/0)**

Pre-requisite: -

History of computing and internet; roles of computers in our society; computer terminology, computer hardware and devices, operating system; and application programs.

**D211: English II** **3(32/32/0)**

Prerequisite: D115

Continuation of English I with grammatical structures of English; reading selected English literature, listening to selected English media; giving English oral presentations; and writing formal letters and essays.

**D311: English III** **3(32/32/0)**

Prerequisite: D211

Study and practice in reading and writing on student-related topics from nursing textbooks/journals/ magazines; improvement of reading and writing abilities with emphasis on review of vocabularies, mechanics, sentence structure, organization, and development; improvement of speaking and listening abilities with emphasis on initiating conversation with foreigners and making arguments.

**D121: Communication in Nursing** **2(16/32/0)**

Prerequisite:-

Introduction to interpersonal communication in nursing; assertive and responsible communication; interpersonal and therapeutic relationship; key elements in building relationships including warmth, respect, genuineness, empathy, self-disclosure, questioning and expressing opinions; communicating with other health care professionals; barriers to effective communication; enhancing communication skills through practice experience in consideration of professional standards.

**D122: Anatomy and Physiology 6(80/32/0)**

Prerequisite: -

Anatomical structure and physiological functions of human body: movement; homeostasis and metabolism of body systems including nervous system, endocrine system, cardiovascular system, respiratory system, digestive system, urinary system, reproductive system, hematologic system, sensory organs, integumentary system, and immune system.

**D123: Microbiology and Parasitology 3(40/16/0)**

Prerequisite: -

Basic microbiology, parasitology, and immunology; nature, reproduction, growth, and transmission of common microorganisms and parasites in Bangladesh; prevention including universal precaution and immunization, control, sterilization, and disinfection; and specimen collections and examination.

**D124: Nutrition and Nutritional Support 3(40/16/0)**

Prerequisite: -

Introduction to nutrition; roles of nutrition on health; human needs of nutrients across life span; eating pattern of Bangladesh population and factors affecting nutritional deficits within Bangladesh culture; food preservation; nutritional assessment, nutritional related-health problems including malnutrition and nutrient deficiency from diseases and treatments; and nutritional support with modification based on individual differences, family and community context.

**D125: Pathophysiology 3(48/0/0)**

Prerequisite: D113, D122

Introduction to pathophysiology: nature of diseases and pathogenesis; gene and genetics; alteration of cellular and tissue biology, fluid-electrolyte balance, acid-base balance; immune system, inflammation and wound healing, infection, immunodeficiency, and psychoneuroimmunology; biology of benign tumor, cancer and cancer spread; stress and disease; pain syndrome; alteration of neurologic function, hormonal regulation, hematologic function, cardiovascular function, pulmonary function, renal and urinary tract function, digestive function, function of reproductive system including sexual transmitted infections and HIV/AIDS, musculo-skeletal function, and function of the integument; and multi-system dysfunction.

**D126: Biostatistics and Epidemiology 2(32/0/0)**

Prerequisite: -

Statistic methods of collection, analysis, and presentation of health related data and statistics; selected population statistics (e.g. birth rate, literacy rate, life expectancy); selected health related statistics (e.g. mortality and morbidity rate: incidence and prevalence); principle of epidemiology, occurrence and distribution of diseases; indicators of community health; surveillance; epidemic investigations, prevention and control of communicable and non-communicable diseases.

**D221: Pharmacology 3(48/0/0)**

Prerequisite: D122, D123

Introduction and basic principles of drug actions: pharmaceutical, pharmacokinetic, and pharmacodynamic; essential drugs; forms of drugs and preparation; action, adverse effect and

its management of major drug classes including antibiotics and antiparasitics, anti-inflammatory drugs, antipyretics and analgesics, drugs affecting body systems, i.e., gastrointestinal, urinary, cardiovascular, endocrine, and nervous system, anti-psychotic, anti-neoplastics and immunosuppressive agents.

**D131: Introduction and Conceptual Bases of Nursing**  
**3(48/0/0)**

Prerequisite: -

Historical development of the nursing profession and factors influencing the progression and acceptance of nursing as a profession within and outside Bangladesh; basic concepts relevant to the nursing profession: person, environment, health, and nursing focusing on definitions, relationship among these concepts, client-centered care, and holistic nursing; nurses' roles and competencies required in promoting, maintaining, and restoring health; nursing ethics; nursing self-management and accountability within health care system; nursing organizations and health-related organizations nationally and internationally.

**D132: Introduction to Health Assessment 2(16/32/0)**

Prerequisite: D111, D112, D121, D122, D131

Introduction to nursing process; importance of health assessment; sources of data and assessment strategies; basic skills in history taking and physical examination basic to biophysical, psychosocial, and spiritual assessment, and diagnostic tests and investigations emphasis on assessment phase of identifying individual's needs/expectations, responses to actual or potential health problems in the context of family and community across the life span; recording and reporting relevant data from health assessment; ethical concerns relevant to health assessment including privacy, confidentiality, and informed consent.

**D133: Fundamental of Nursing 6(48/32/192)**

Prerequisite: D111, D112, D113, D121, D122, D131

Nurse-client relationship focusing on concepts of nurse as a moral and ethical agent, nurses' ethical behaviors, ethical principles; BNC codes of conducts, regulations, and professional standards; principles of care emphasizing on responding to basic needs for physical comfort and personal hygiene, safety, infection control, environmental comfort, positioning, transferring, activity and exercise, nutrition/hydration, and elimination; administering medication, intravenous fluid, and blood products; admission and discharge.

**D134: Introduction to Nursing Inquiry 1(16/0/0)**

Prerequisite: -

Foundations to nursing inquiry; strategies for promoting nursing students' inquiry basic skills

**D135: Community Health Nursing I 2(32/0/0)**

Prerequisite: D131

Definitions of community health nursing and community-oriented nursing; foundations of community health nursing and community-oriented nursing; Bangladesh primary health care policy and health care delivery system; nurses' roles and interventions in community health nursing practice focusing on health promotion and illness prevention through immunization, health education, early screening, and injury prevention and safety promotion; concept of continuity of care; and factors contributing to successful community health nursing practice in Bangladesh context.

**D231: Community Health Nursing II: Individual Health and Basis of Family Health**  
**3(32/0/96)**

Prerequisite: D132, D135

Concepts and theories related to health promotion focusing on self-care of an individual, health beliefs model, and empowerment; life style/health behavioral modification and behavioral change communication; basic principles of family-centered care; family dynamic; healthy family; family assessment; family counseling; family planning and contraception; theory and practice of nursing care emphasis on health promotion, illness prevention, and essential nursing treatments of healthy clients and clients with minor health deviation across the life span, i.e., infants, children, adolescents, adults, elders, and women concerning individual differences and family and community context and their participation in care.

**D236: Community Health Nursing III: Basis of Community Health**  
**3(32/0/96)**

Prerequisite: D231

Concept of community as a unit of care; cultural diversification in community; priority public health programmes in Bangladesh; nurses' roles and interventions in community settings; basic concepts in care of community health; school health; practice of community health promotion and prevention on selected priority public health programmes and school health using community approach.

**D232: Adult Nursing I** **3(24/0/144)**

Prerequisite: D123, D124, D125, D132, D133, D134

Nature of acute and chronic illnesses; nurses' roles and interventions in restoring health, preventing complications and recurrence, and maintaining health of adult clients with acute and chronic illness using client-centered and holistic care in the context of family and community; theory and practice in providing care to adult clients undergo surgical interventions and anesthesia; theory and practice in common and simple health problems/situation of adult clients with alterations in integumentary system, infectious diseases, and nosocomial infection; ethical issues related to the care of adult clients including patient's rights; informed consent, justice, and advocacy.

**D233: Adult Nursing II** **3(24/0/144)**

Prerequisite: D221, D232

Continuation of Adult Nursing I; theory and practice in common and simple health problems/situations of adult clients with alterations in digestive system, genitourinary system, and male and female reproductive system; ethical issues relevant to the care of adult clients.

**D331: Adult Nursing III** **6(48/0/288)**

Prerequisite: D233

Continuation of Adult Nursing II; theory and practice in common and simple health problems/situations of adult clients with cancer, alterations in cardiovascular system, respiratory system, nervous and endocrine system, hematologic and lymphatic system, immune system and HIV/AIDS including Voluntary Counseling and Testing, and conditions of the eye and ENT; ethical considerations in dealing with truth-telling and patient advocate.

**D234: Orthopedic Nursing** **4(32/0/192)**  
Prerequisite: D122, D125, D132, D133, D134

Introduction to orthopedic nursing; concept of immobility; nurses' roles and interventions in preventing musculoskeletal injuries, maintaining and restoring health of orthopedic clients using client-centered and holistic care in the context of family and community; theory and practice in providing care to clients with fracture and dislocation, orthopedic surgery, autoimmune and inflammatory disorders, degenerative disorders, infections, neoplasms, and congenital and developmental disorders; immobilization and use of orthopedic devices; ethical and legal consideration in care of orthopedic clients.

**D235: Pediatric Nursing** **5(48/0/192)**  
Prerequisite: D123, D124, D125, D132, D133, D134, D221

Introduction to pediatric nursing; principles of care of sick children including infant, child, and adolescent focusing on family-centered care; prevalence of acute and chronic conditions of children in Bangladesh; disturbance in growth and development; child assessment; family assessment; child safety promotion; theory and practice in providing care to children with acute and chronic illness in common nursing situations including problems with malnutrition, acute and chronic infection, convulsion, congenital anomalies; alterations in cardiovascular system, hematologic and lymphatic system, and endocrine system.

**D237: Basis of Gerontological Nursing** **2(16/0/96)**  
Prerequisite: D232

Demographic trends in Bangladesh; concepts, theories related to aging assessment and nursing strategies related to common health problems of elder population in Bangladesh, health promotion and illness prevention in the elderly, holistic care of the elderly, issues and trends in providing care for the elderly.

**D238: Mental Health and Introduction to Psychiatric Nursing**  
**2(16/0/96)**  
Prerequisite: D132, D133, D135

Introduction to mental health and psychiatric nursing; bio-psychosocial theories of mental health and illness, determinants of mental illness; cultural and socioeconomic factors; theory and practice in providing nursing care to individuals experiencing mood disturbances within the context of their families and communities; public and private systems of care for mental health promotion across life-span in Bangladesh.

**D332: Midwifery I** **8(64/0/384)**  
Prerequisite: D124, D132, D133, D236

Introduction to midwifery; roles, function and responsibility of midwives (nurse-midwives) in the health care system; ethics in midwifery; maternal and newborn health situations in Bangladesh; socio, economic and cultural factors affecting maternal and newborn health; government initiatives and social movements for maternal and newborn health; application of nursing process as basis for the practice of midwifery; fertilization; growth and development of foetus; changes and impacts of pregnancy on bio-psychosocial and spiritual aspects of women during pregnancy; mechanisms of labour; theory and practice in providing comprehensive (promotion, supportive and restorative) and holistic care to pregnant women and their foetus/newborns and families from preconception, antenatal, labour to postnatal

period; with the woman as the central figure in the care; emphasis is placed on management of normal delivery with active management of third stage of labour, immediate care of the newborns and early and exclusive breast feeding; and family planning.

**D333: Midwifery II** **8(64/0/384)**  
Prerequisite: D332

Theory and practice in providing comprehensive and holistic care to pregnant women having abnormal obstetric and/or underlying medical conditions and their fetus/newborns and families from preconception, antenatal, labour to postnatal period; with the woman as the central figure of the care; emphasis is placed on early detection of obstetric complications and conditions detrimental to health of pregnant women and their fetus, timely procurement of medical assistance and/or referral, and first line management for obstetric emergencies and life threatening situations; emergency obstetric care; use of midwifery standards for quality management; ethical issues concerning the maternal and newborn health in Bangladesh.

**D334: Leadership and Management** **2(16/0/96)**  
Prerequisite: D331, D332

Introduction to nursing leadership and management; factors influencing effective nursing leadership and management in Bangladesh health care delivery system; constructing leadership skills; theory of nursing management emphasis on time management, conflict management, and organizational management; planned change; nurses' role in clinical supervision; use of standard for quality management in nursing services; and practice as a novice leader in clinical settings to develop leadership and management skills.

**D335: Nursing of Newborns** **2(32/0/0)**  
Prerequisite: D235, D332

Care of newborns in the first 28 days of life and special newborn care for those with congenital anomalies and abnormal conditions at birth: review pathophysiology including causes, signs and symptoms, and treatments; health assessment, risk assessment, supportive/emergency and restorative care of newborns with abnormalities; family planning and family counseling of the affected congenital anomalies families.

**D336: Research and Evidence-Based Nursing** **1(16/0/0)**  
Prerequisite: D126, D134

Concept and significance of research utilization and evidence-based nursing practice to improve quality nursing care; research process; reading research articles and interpreting research results; application of research evidence in nursing practice in Bangladesh.

**D337: Nurse Internship** **3(0/0/288)**  
Prerequisite: All professional courses

Practice as a novice registered nurse on a student-selected clinical area at either hospital or community setting.



**Study Master Plan for Clinical Rotation: Diploma Programme  
Year 1 Semester 1**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21-24	25-26
Study, No Clinical Practice																					
								Review	Mid-term exam									Review	Final Exam	School Break	Re-examination

**Year 1 Semester 2**

27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47-50	51	52
Study 4 days/week, Clinical Practice 2 days/week, 8 hours/day (Fundamental of Nursing; Selected wards are medical and surgical wards)																						
								Review	Mid-term exam									Review	Final Exam	School Break	Re-examination/ adding clinical practice weeks	

**Year 2 Semester 1**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21-24	25	26
<p>Study 3 days/week, Practice 3 days/week, 8 hours/day</p> <p><b>Adult Nursing I (ADN I):</b> Selected wards are medical and surgical wards</p> <p><b>Orthopedic Nursing (OP):</b> Selected wards are: orthopedic wards and rehabilitation units (if any)</p> <p><b>Community Health Nursing II (CHN II):</b> Selected settings are: OPD, homes in the surrounding community (and/or rural community)</p>																						
ADN I						OP			Mid-term exam	OP						CHN II				Final Exam	School Break	Re-examination/ adding clinical practice
CHN II				OP		ADN I				ADN I			OP									
OP					CHN II					OP			ADN I									

**Year 2 Semester 2**

27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49-50	51-52
<p>Study 2 days/week, Practice 4 days/week, 8 hours/day</p> <p><b>Adult Nursing II (ADN II):</b> Selected wards are medical and surgical wards</p> <p><b>Pediatric Nursing (PN):</b> Selected wards are pediatric wards</p> <p><b>Community Health Nursing III (CHN III):</b> Selected settings are schools, community health centers, surrounding communities (urban and/or rural communities) etc.</p> <p><b>Basis of Gerontological Nursing (GER):</b> Selected wards are medical/surgical wards and/or geriatric wards (if any)</p> <p><b>Mental Health and Basis of Psychiatric Nursing (MPN):</b> Selected settings are adult wards where clients with mental health/psychosocial problems are admitted (anxiety, anticipated stress etc.)</p>																							
AD II					PN				Mid-term examination	PN		CHN III			GER		MPN	Final examination	MPN		School Break	Re-examination/ adding clinical practice weeks	
PN					CHN III					GER		MPN			AD II		AD II						
CHN III			GER		MPN					AD II				PN		PN							
GER		AD II				MPN	PN				CHN III												
AD II		CHN III			AD II		PN	PN				MPN		GER	GER								

**Year 3 Semester 1**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23-24	25-26
<p align="center">Study 2 days/week, Practice 4 days/week, 8 hours/day, <b>Mid-term examination on Week 10</b>  <b>Adult Nursing III (ADN III):</b> Selected wards are medical and surgical wards  <b>Midwifery I (MW I):</b> Selected areas are antenatal clinic(ANC), Postpartum wards(PP)/Family Planning(FP), Labour Rooms(LR),community and home settings for domiciliary midwifery (if possible)</p>																							
ADN III: Med				ADN III: Surg				MW I: ANC				MW I: LR				MW I: PP/FP		Final Examination	MW I: PP/FP		School Break	Re-examination/ adding clinical practice weeks	
ADN III: Surg				ADN III: Med				MW I: PP/FP				MW I: ANC				MW I: LR							
								MW I: LR				MW I: PP/FP				MW I: ANC							
MW I: ANC				MW I: LR				MW I: PP/FP				ADN III: Med				ADN III: Surg							
MW I: PP/FP				MW I: ANC				MW I: LR				ADN III: Surg				ADN III: Med							
MW I: LR				MW I: PP/FP				MW I: ANC															

**Year 3 Semester 2**

27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46-51			52	
<p align="center">Study 2 days/week, Practice 4 days/week, 8 hours/day  <b>Midwifery II (MW II):</b> Selected areas are antenatal clinic(ANC), Postpartum wards(PP)/Family Planning(FP), Labour Rooms(LR),community and home settings for domiciliary midwifery (if possible)  <b>Leadership and Management (LEAD):</b> Selected wards are any wards  <b>Nurse Internship (INT):</b> Selected settings are any wards/community settings based on student's choice (students will be rotated 6 days/week as a staff nurse)</p>																							
MW II: PP/FP				MW II: LR				Mid-term exam	MW II: ANC				LEAD				Final exam	School Break	Re-Exam/ Adding	INT: Students work as staff nurses in self-selected area	BNC- Comprehensive		
MW II: Batch II-ANC				MW II: PP/FP					LR	LEAD				MW II: LR									
MW II: Batch III-LR				MW II: ANC		LEAD			LEAD	MW II: PP/FP				ANC									

