Liberian Board for Nursing & Midwifery
Republic of Liberia

Pre-Licensure
Registered Nurse Curriculum

February 2019

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Mr. Humphrey Gibbs Loweal
Chairman
Liberian Board for Nursing and Midwifery

Introduction

Nurses in the Republic of Liberia are the largest cadre of health care providers. In September, 2019 at the 74th United Nations General Assembly the International Council of Nurses (ICN) representing nurses around the globe spoke at the first ever High-level meeting on Universal Health Coverage. To address the shortfall of nurses and upgrade/maintain their clinical skills as the providers of primary health care, registered nurse curricula must be consistently and strategically updated.

Since the last registered nurse curricular revisions in 2014, Liberia experienced the greatest number of deaths (4,800) from Ebola. The response to Ebola highlighted the necessity for nurses in Liberia to upgrade and maintain their clinical skills along with further development in health systems leadership and management. New cadres of nursing students, with this newly revised registered nurse curriculum will address gaps identified by the entire Liberian Board for Nursing and Midwifery and their partners to support a highly responsive and resilient health care cadre and system.

The Institute for Health Metrics and Evaluation, using the GBD tool (https://www.cdc.gov/globalhealth/countries/liberia/default.htm), has identified the top causes of death in Liberia for 2018 as malaria, diarrheal diseases, neonatal disorders, lower respiratory infections, ischemic heart disease, HIV/AIDS, stroke, tuberculosis, sexually transmitted infections and cirrhosis, respectively. These top causes of death highlight the double burden of disease impact in Liberia being equally spread between infectious and non-communicable diseases. Syllabi have been updated and additional courses have been added to address the competencies required for nurses to manage the care of client populations where they live, work, and play. Of note are new courses titled: Care of Aging Populations, Ready for Practice Workshop, and Nursing Capstone.

Vision Statement

To produce competent nurses who will improve and promote the health status of the Liberian population

Mission Statement

The mission of the curriculum is to train and produce competent nurses who will provide quality nursing care to clients with different needs (physical, emotional, spiritual, and social) in the health facility and community.

Philosophy

Nurses are frontline service providers in the community and hospital levels. They provide preventive, health promotion and curative care to all population groups. They also provide care at all levels of health and participate in the management of health systems. Rehabilitative care is also their prerogative.

Values of the graduate

Be kind and compassionate, must be assertive, skillful and knowledgeable, independent, respectful, committed worker, lifelong learner, must possess interpersonal skills, must be accountable and responsible, culturally sensitive, must be critical thinkers/enquiry mind and problem solvers.

Program Content for Pre-Licensure Registered Nurse Curriculum Sequencing:

Year 1, Semester 1					Year 1, Semester 2				
Courses	Credits	Theory	Lab	Clinical	Courses	Credits	Theory	Lab	Clinical
Information, Communication and Technology (ICT) in the Evaluation of Research	3	56	0	0	Primary Health Care & Community Health Nursing: Serving Populations	5	56	0	168
Basic Math	2	28	0	0	Pharmacology & Drug Calculations	4	56	0	0
Fundamentals of Nursing I	4	14	112	0	Fundamentals of Nursing II	5	14	0	126
Anatomy & Physiology I	3	42	28	0	Anatomy & Physiology II	3	42	28	0
Microbiology	3	42	0	0	Health Assessment	3	28	84	0
Psychosocial Care (Psychology and Sociology)	2	28	0	0					
English Communication Skills	2	28	0	0					
Total	**19**	**238**	**140**	**0**	**Total**	**20**	**196**	**112**	**294**

Year 2, Semester 1					Year 2, Semester 2				
Courses	Credits	Theory	Lab	Clinical	Courses	Credits	Theory	Lab	Clinical
Nutrition	2	28	0	0	Teaching in Nursing	3	42	0	126
Obstetrics Maternity Nursing I	4	28	0	126	Obstetrics Maternity Nursing II	4	42	0	126
Medical-Surgical Nursing I	4	42	0	126	Medical-Surgical Nursing II	5	42	0	126
Pediatric Nursing I	3	42	0	126					
Ethical & Professional Adjustment	2	28	0	0					
Total	**15**	**168**	**0**	**378**	**Total**	**12**	**126**	**0**	**378**

Year 3, Semester 1					Year 3, Semester 2				
Courses	Credits	Theory	Lab	Clinical	Courses	Credits	Theory	Lab	Clinical
Tropical & Communicable Diseases	3	42	0	84	Nursing Administration	6	42	0	126
Psychiatric Mental Health Nursing	5	70	0	126	Ready for Practice Workshop	1	0	28	0
Evidence- Based Practice (EBP) in Nursing	2	28	0	0	Nursing Capstone Clinical Affiliation	6	0	0	252
Nursing Care of the Aging Client	2	28	0	0	Nursing Capstone Seminar	1	14	0	0
Pediatric Nursing II	4	42	0	126	Simplified Diagnosis & Treatment	3	28	0	84
Total	**16**	**210**	**0**	**336**	**Total**	**17**	**84**	**28**	**462**

Credit Calculations based on 14 instructional weeks
1 didactic hour per week = 1 credit hour
3 clinical (including lab) hours per week = 1 credit hour

Information, Communication and Technology (ICT) in the Evaluation of Research

Credits: 3

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional sessions, 1 exam session and 1 presentation session)
56 hours (Meets in the computer lab twice weekly for two hours each sessions)

Prerequisites:

NA

Course Description:

This course equips the learner with the knowledge and skills needed to apply concepts of ICT to the health care delivery system. A strong emphasis is placed on its application to the research process including evaluation of the literature and implementation of evidenced based care strategies. ICT is taught in the computer lab to provide an environment for hands on application of concepts.

Course Outcomes:

At the end of this course the student will be able to

- Use ICT to enhance knowledge base through improved research strategies and critical reading skills
- Appreciate the relationship between ICT and quality, evidence-based care
- Access databases available on the internet
- Develop an effective search strategy by identifying appropriate key terms and using advanced search options
- Identify the characteristics of scholarly resources
- State the common sections of a research study
- Evaluate the hypothesis, study methods and results of a research study

- Define plagiarism
- Appropriately cite references in your own work

Competencies:

Knowledge	Attitudes/Values	Skills
Perform basic foundational computer skills		See skills checklist
Successfully navigate the following applications: • Word • PowerPoint • Excel • Internet (browser) • Email (server)	Appreciate the relationship between ICT and quality, evidence-based care	See skills checklist
Develop an effective search strategy		Identifying appropriate key terms
Identify the characteristics of scholarly resources	Justify the importance of high-quality research	Distinguish between primary and secondary references
State the common sections of a research study		Practice critically reading primary sources
Evaluate the hypothesis, study methods and results of a research study		
Define plagiarism	Respect the importance of giving credit to authors for their work	Learn how to quote, paraphrase and summarize appropriately
Appropriately cite references in your own work		Cite references in appropriate format

Course Content:

Weeks 1-4 (Sessions 1-8)

A. Write a response to the following prompt:
B. Why did you decide to become a Registered Nurse? What do you see as the biggest health issue in Liberia and why? How do you plan on becoming a life-long learner?
C. After writing a response to the prompt, students will use the skills checklist to practice important computer skills.

***Responses to the prompt are NOT graded, rather students are graded on their completion of the skills checklist. These skills are essential to student learning throughout the program and will be used throughout their midwifery career.

Week 5-7 (Sessions 9-14)

A. How to Critically Read and Analyze a Research Study
    1. How to Read and Understand a Scientific Article by Dr. Jennifer Raff
    2. Sample Articles
    3. Free and Open Access Databases:
        a) "Free Full Text Articles": Where to Search for Them?
        b) 101 Free Online Journal and Research Databases for Academics
B. Sections of a Research Study
    1. Abstract
    2. Introduction
    3. Methods:
        a) Setting
        b) Design
        c) Sample size
        d) Sampling procedures
        e) Data collection instruments/procedures
        f) Variables
        g) Ethical considerations
    4. Results
    5. Discussion
    6. Conflicts of Interest
    7. References

    Assignment: Carefully read the 11 steps in the article by Dr. Raff. Select a research study of interest to you, preferably in a clinical area that you feel you need to learn more about and answer the questions within each of the 11 steps in a Word

document. Email this document to your professor when you are finished. You have one week to complete each assignment.

Week 8: Midterm Exam

Weeks 9-15 (Sessions 15-28)

A. In the second half of this course, students are given ample class time to develop a brief term paper (3 pages-not to exceed 4 pages)
   1. Week 9: select a topic (to maximize your learning/exposure to new information, students should choose a unique topic)
   2. Week 10: Literature search
   3. Week 11: Create outline (to be approved by instructor before beginning to write)
   4. Weeks 12-13: Write paper
   5. Weeks 14-15: Create PowerPoint Presentation
   6. Week 16 Presentations to classmates and instructors

Teaching/Learning Strategies:

- Demonstration-return demonstration
- Lab practice
- Reading assignments/articles (homework)

Course Expectations:

- Regular attendance
- Come to class prepared
- Participate actively in sessions
- Complete all assignments by the assigned due dates

Required Resources:

- Skills checklist
- Skills lab
- Computers/Internet access

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Satisfactory completion of skills checklist 15%
- Midterm Exam 15%
- Weekly assignments for weeks 5-7 (3 total) 30%
- Term Paper 20%
- Presentation 15%

References:

The American Psychological Association. (2020). Publication Manual of the American Psychological Association, 7th ed. ISBN-10: 1433832178 and ISBN-13: 978-1433832178

ICT Skills Checklist

Your instructor will initial each section after the student has demonstrated competency. Once the student is competent in all areas on this checklist, the student will move on to the research portion of the course.

Identify the Following	Instructor Initials
Keyboard	
Mouse	
Cursor	
Processor	
Storage devices	
• Hard drive	
• USB/Flash drive	
• Compact Disk (CDs)	
Create a Word document	
Write a paragraph	
Save a file	
Change the font, size, color, etc.	
Change the alignment	
Create a bulleted list	
Create a hyperlink	
Insert a table	
Save a document	
Reopen the document	
Print the document	
Scan the document	
Create an excel spreadsheet	
Create a PowerPoint presentation	
• Add a slide	
• Change the layout of a slide	
• Play the slideshow	
• Save the slideshow	
• Reopen the slideshow	
Open the internet	
Create an email	
• Attach a file	
• Send an email	
Create an Excel spreadsheet	
• Enter data into cells	
• Create a formula (total a column)	
Launch Google	
Navigate website menus	

Basic Math

Credits: 2

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional and 2 exams)

28 instructional hours

Prerequisites:

NA

Course Description:

This course reviews basic mathematical skills and their applications in calculating dosages and solutions. The course prepares the students to achieve mathematical competencies required for medication administration in Fundamentals of Nursing and dosage calculations in Pharmacology courses.

Course Outcomes:

At the end of this course the student will be able to

- Apply basic mathematical skills in solving problems related to calculation of drug dosages and intravenous solutions.
- Identify best practices to ensure accuracy in mathematical problem-solving.

Competencies:

Knowledge	Attitudes/Values	Skills
Solve problems using fundamental mathematical operations, i.e., addition, subtraction, multiplication and division.	Appreciate the importance of mathematical accuracy in medication administration.	Demonstrate ability to use fundamental mathematical operations, i.e., addition, subtraction, multiplication and division.

Solve problems using mathematical operations related to fractions, decimals and percentage in dosage and solutions.		Demonstrate ability to apply fraction, decimal and percentage in problem-solving in dosage and solutions.
		Convert from one form of measurement to another and from larger to smaller units and vice versa.

Course Content:

Unit I │Arithmetic Operations

A. Introduction to Numbering Systems
    1. Basic Roman Numerals;
    2. Arabic Numerals
B. Review of Basic Math
    1. Addition;
    2. Subtraction;
    3. Multiplication;
    4. Division
C. Simple Calculations
    1. Fractions;
    2. Percentages
        a) Ratios;
        b) Proportions;
    3. Decimals
        a) Changing fractions to decimals and vice versa;
        b) Adding, subtracting, multiplying and dividing decimals

Unit II │ System of Measurements

A. Apothecary System
B. Household System
    1. Household Equivalents;
    2. Conversion within the Household System:
        a) Larger to smaller units;
        b) Smaller to larger units;
    3. Practice Problems: Household System Conversions

C. Metric System
    1. Metric and English Units of Measurement;
    2. Conversion within the Metric System:
        a) Larger to smaller units;
        b) Smaller to larger units;
    3. Practice Problems: Metric System Conversions

Unit III │ Methods of Calculation

A. Drug Calculation
    1. Basic Formula;
    2. Ratio and Proportion/Fractional Equation;
    3. Dimensional Analysis;
    4. Calculating Dosages Based on Weight;
    5. Calculating Child's Dosage from a Known Adult Dose of Drug;
    6. Considerations When Calculating Dosages of Oral Drugs:
        a) Tablets, capsules and liquids;
        b) Drugs administered via nasogastric tube
B. Calculating Suspensions and Solutions
    1. Drug Reconstitution;
    2. Dimensional Analysis;
    3. Considerations When Calculating Dosages of Parenteral Drugs
C. Intravenous Therapy
    1. Calculating IV flow rate: milliliters per hours;
    2. Calculating IV flow rate: drops per minute;
    3. Macrodrip and microdrip IV sets

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Group exercises
- Classroom presentations
- Educational games
- Homework/assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Library
- Flip chart/slides
- Internet

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Boyer, M.J. (2016). Math for Nurses: *A Pocket guide to Dosage Calculation and Drug Preparation* (9th ed.). Philadelphia: Wolters Kluwer.

Fundamentals of Nursing I

Credits: 4

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
14 instructional hours
112 lab hours

Prerequisites:

NA

Course Description:

The Fundamentals of Nursing I course is designed to introduce the student to the nursing profession through acquisition of knowledge of nursing history, code of ethics, values, scope of practice and the nursing process. The student learns beginning knowledge, skills and values to provide safe patient care. The content of this first course relates to concepts such as communication, vital signs, basic infection control (medical asepsis), activity and mobility, basic safety and comfort, hygiene, basic nutrition, elimination, general skin care and selected specimen collection. There is a laboratory component to this course where the student can learn and practice skills related to these concepts.

Course Outcomes:

At the end of this course the student will be able to

- Discuss the history of nursing as it evolves into professional practice with distinct roles within the current health care delivery system.
- Use the nursing process in planning and providing safe and quality care to clients and their family.
- Communicate effectively with the client and family for the purposes of collecting health information (health interview) and providing emotional care and reassurance.

- Perform basic nursing care procedures using standards based on evidence-based practice.

Competencies:

Knowledge	Attitudes/Values	Skills
Discuss the evolution of the nursing profession in Liberia and the scope of nursing practice.	Incorporate the code of ethics in own value system when providing care and working with others.	Use the nursing process in care planning and providing safe and quality patient/family care.
Elaborate on the role of nurses in the current health care system.	Show respect to patients, families and others.	Demonstrate ability to communicate with patients and families to collect health information.
Describe the phases of the nursing process as a systematic way of problem solving.	Adopt beginning professional behavior in carrying out one's duties.	Provide emotional care to patients and families that promote reassurance and comfort.
State the rationale for performing procedures.	Appreciate the importance of accuracy and integrity in delivering care.	Perform basic nursing care procedures based on evidence-based practices and professional standards. (See list in Course Content)
Articulate one's roles and responsibilities in Infection Prevention and Control: -Transmission of infections -Nosocomial infection	Respect patient's expression of values, preferences and needs and differing views of others.	Perform skin assessment to identify risk for impaired integrity.
Describes legal and regulatory factors that apply to nursing practice.	Value patient's expertise with own health and symptoms.	Demonstrate beginning skills in reporting and documenting care.
	Recognize own accountability in observing infection control practices.	Uses appropriate strategies to reduce transmission of infection.
	Aware of one's limitations and strengths as a member of the healthcare team and seeks assistance as needed.	Demonstrate procedure for admitting, transferring and discharging patients.

	Appreciate the value of collaboration and team functioning in care of patients.	

Course Content:

Unit I │Trends and Perspectives of Nursing

A. History of Nursing
    1. Trends in Nursing and Midwifery Practice;
    2. Nursing Theorist: Imogene King;
    3. The Liberian Board for Nursing and Midwifery;
    4. History of Nursing Education in Liberia
B. The Role of the Nurse
    1. Health Care Facilities;
    2. Community Services;
    3. Family Care in Homes;
    4. Donors/NGOs/Partners;
    5. Nationwide
C. Legal & Ethical Considerations
    1. Negligence and Malpractice;
    2. Criminal Acts;
    3. Code of Ethics;
    4. Nurse Practice Acts;
    5. Midwifery and Nursing Organizations
D. Health Care Delivery System
    1. Organogram;
    2. Services:
        a) Preventive vs curative;
        b) Primary;
        c) Secondary;
        d) Tertiary;
    3. Challenges:
        a) Financial;
        b) Personal;
        c) Transportation;
        d) Drugs and supplies;
        e) Communication;

f) Maintenance

Unit II │The Theory of Imogene King

A. Who Is Imogene King?
B. Basic Assumptions of the Interaction Theory
C. Relevance of Her Theory to Interacting With Patient and Family

Unit III │The Nursing Process

A. Steps of the Nursing Process
    1. Assessment;
    2. Diagnosis or Problem Statement;
    3. Planning – Outcomes (Goals) and Interventions;
    4. Implementation;
    5. Evaluation
B. Sources of Data
    1. Subjective Data;
    2. Objective Data
C. The Nursing Process and Problem Solving Process
D. Reporting and Documenting

Unit IV │Communication

A. Communication Is a Process
    1. Sender;
    2. The Message;
    3. The Channel;
    4. The Receiver;
    5. Feedback
B. The Art of Effective Verbal Communication
    1. Pacing;
    2. Intonation;
    3. Clarity and Brevity;
    4. Timing and Relevance;
    5. Credibility
C. The Non-Verbal Communication
    1. Facial Expression;
    2. Posture and Gait;
    3. Personal Appearance;

4. Gesture;
5. Touch

D. Other Variables That Affect Communication:
    1. Age Differences;
    2. Gender;
    3. Personal Space;
    4. Socio-Cultural Factors;
    5. Roles and Relationships

E. The Interaction Theory by Imogene King
    1. How Does It Relate to Communication with Patient and Family;
    2. The Goal Attainment Theory

Unit V │Infection Prevention and Control

A. The Chain of Infection
    1. Infectious Agent;
    2. Reservoir;
    3. Portal of Exit;
    4. Mode of Transmission;
    5. Portal of Entry;
    6. Susceptible Host

B. Classification
    1. Local or Systemic;
    2. Primary or Secondary;
    3. Exogenous or Endogenous;
    4. Acute or Chronic

C. Predictable Stages of an Infectious Process
    1. Incubation;
    2. The Prodromal Stage;
    3. Illness;
    4. Decline;
    5. Convalescence

D. Body's Defense against Infection
    1. Primary Defenses;
    2. Secondary Defenses;
    3. Tertiary Defenses

E. Methods of Infection Control
    1. Medical Asepsis;
    2. Surgical Asepsis;

3. Isolation Techniques:
    a) Protective isolation;
    b) Transmission-based isolation;
4. Sterilization;
5. Disinfection

F. Predictable Stages of an Infectious Process
1. Incubation;
2. The Prodromal Stage;
3. Illness;
4. Decline;
5. Convalescence

Unit VI │Comfort and Safety

A. Pain Assessment
1. Types of Pain:
    a) Cutaneous;
    b) Visceral;
    c) Deep somatic pain;
    d) Radiating pain;
    e) Referred pain;
    f) Phantom pain;
    g) Psychogenic pain;
2. Cause of Pain:
    a) Nociceptive pain;
    b) Neuropathic pain;
3. Factors to Assess:
    a) Location;
    b) Intensity:
        (1) Pain scale;
        (2) Non-verbal manifestation of pain;
    c) Quality;
    d) Duration:
        (1) Chronic;
        (2) Acute;
        (3) Intractable;
    e) Relieving factors;
    f) Aggravating factors;

4. Assessing Pain in Special Circumstances:
    a) Infants and children;
    b) Older adults;
    c) Unconscious patient;
    d) Cultural variations in response to pain;
5. Comfort Measures in Pain:
    a) Application of heat and cold;
    b) Massage;
    c) Rest and sleep;
    d) Psychological support

B. Fall Prevention
1. Fall Risk Assessment;
2. Care Plan to Prevent Falls:
    a) Ambulatory patient with unsteady gait;
    b) Bedridden patient;
    c) Patient with cognitive impairment;
    d) Patient with sensory impairments;
    e) Infants and children;
3. Application of Restraints;
4. Creating a Restraint-Free Environment

C. Fire and Safety
D. Reporting and Recording

Unit VII │Nutrition

A. Oral Nutrition
B. Basic Nutritional Assessment
1. Screening for Nutritional Risk;
2. Body Mass Index (BMI);
3. Assisting with Oral Nutrition;
4. Aspiration Precautions

Unit VIII │Activity and Mobility

A. Problems with Immobility
1. Potential Skin Impairment;
2. Contractures and Skeletal Deformities;
3. Muscle Atrophy;
4. Respiratory and Cardiovascular Effect;
5. Effects on Psychological Well-Being

B. Safe Patient Handling, Transfer, and Positioning
    1. Safe and Effective Transfer Techniques:
        a) Bed to bed transfer (stretcher);
        b) Bed to chair and back to bed;
        c) Wheel-chair;
    2. Positioning Patient for Procedures:
        a) Dorsal recumbent;
        b) Trendelenburg;
        c) Lateral;
        d) Knee-chest;
        e) Jack knife;
        f) Sims;
        g) Prone;
        h) Prone;
        i) Lithotomy;
    3. Protective Position:
        a) Supine;
        b) Fowler's;
        c) Side lying;
        d) Prone
C. Range of Motion Exercises

Unit IX │Skin Care and Personal Hygiene

A. Skin Care
    1. Risk Assessment for Impaired Integrity;
    2. Prevention of Pressure Ulcers;
    3. Reporting and Documenting
B. Bathing the Patient
    1. Self-Bath;
    2. Partial/Assisted Bath;
    3. Complete Bath;
    4. Therapeutic Bath
C. Oral Care
    1. Assessing the Oral Cavity;
    2. Assisting Patient;
    3. Providing Oral Care in Unconscious or Debilitated Patient
D. Care of Hair, Nails, Eyes, Nose, Eyes, Ear, Perineal Areas
E. Foot Care

F. Bed Making
    1. Types of Beds
        a) Open Bed;
        b) Closed Bed;
        c) Occupied Bed

Unit X │ Measuring Vital Signs

A. Temperature
    1. Concept of Thermoregulation: Normal Body Temperature;
    2. Heat Exchange between Body and Environment;
    3. Factors That Influence Body Temperature;
    4. Measuring the Body Temperature
B. Pulse Rate and Rhythm
    1. Pulse Regulation: Range Of Normal;
    2. Factors Influencing Pulse Rate and Rhythm;
    3. Assessing Pulses
        a) Pulse sites – palpation;
        b) Apical Pulse – auscultation
C. Respiration
    1. Process of Respiration
        a) External respiration;
        b) Gas transport;
        c) Internal respiration;
    2. Factors that Influence Respiration
        a) Respiratory rates and rhythms;
        b) Assessing respiratory rate and rhythm
D. Blood Pressure
    1. Blood Pressure Regulation;
    2. Factors That Affect Blood Pressure;
    3. Measuring the Blood Pressure;
    4. Normal Blood Pressure

Unit XI │ Elimination, Nursing Procedures Related to

A. Urinary Elimination
    1. Patterns of Elimination;
    2. Assisting With Use of a Urinal And Bedpan;
    3. Applying an External Catheter (Condom-Type);
    4. Insertion of Straight and Indwelling Urinary Catheter;

5. Emptying an Indwelling Urinary Bag

Unit XII │ Selected Specimen Collection

A. Proper Collection and Handling of Specimen
    1. Urine;
    2. Stool;
    3. Blood;
    4. GI;
    5. Sputum
B. Reporting and Recording

Unit XIII │ Admitting, Transfer, and Discharge

A. Procedure for Admission
B. Procedure for Transfer
C. Procedure for Discharge
D. Providing Patient Teaching/Instructions

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Group exercises
- Educational games
- Demonstration-return demonstration
- Lab simulation practice
- Coaching
- Homework and laboratory assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/manikins

Clinical Evaluations:

- Log book
- Skills checklists
- Documentation of Health History and Physical Exam Findings
- OSCE

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%
- OSCE Pass/Fail

References:

Curless, M.S., Ruparelia, C.S., Thompson, E., Trexler, P. A. (2018). Infection Prevention and Control. Baltimore: MD, JHPIEGO Corp.

Perry, A. G., Potter, P.A., & Ostendorf, W. (2018). *Clinical Nursing Skills & Techniques (9th ed.)*. St. Louis: MO, Elsevier.

Anatomy & Physiology I

Credits: 3

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
42 instructional hours
28 lab hours

Prerequisites:

NA

Course Description:

This course is the first part of the two-part course in Anatomy and Physiology. The student will be introduced to basic medical terminology. The content is organized according to the organ systems in the body. Part one will cover cellular functions, genetics and histology. The organs covered include integumentary, muscular, skeletal, nervous and sensory systems. To appreciate the importance of the content, the student will learn the immediate application to selected clinical pathology as they master anatomy and physiology.
The course includes a laboratory component to enhance learning of the structure and function of the organs of the body. The learner will carry out direct observation on anatomical models, perform exercises and testing to enhance their learning.

Course Outcomes:

At the end of this course the student will be able to

- Identify the names and location of basic body parts.
- Describe the functions of major parts of the body.
- Explain the cell physiology and development
- Describe the integration of multiple organs for support and locomotion.

- Apply knowledge of organ system to selected clinical conditions including the pain pathways.
- Decipher the meaning of medical terms by analyzing the word parts.
- Use appropriate medical terminologies in discussion and written communication.

Competencies:

Knowledge	Attitudes/Values	Skills
Name the parts of the body and their location.	Value the knowledge of anatomy and physiology in providing safe and quality nursing care.	Using the anatomical model and/or charts, name the different parts of the body.
Describe the function of major parts of the body.	Appreciate how the body works.	Articulate the function of different organ systems.
Explain cellular physiology and development.	Appreciate learning physiology from the smallest structure – the cell.	Draw the cell structure showing all the parts.
Describe the integration of multiple organs to support and mobilize the body.	Value the importance of how multiple organs work to facilitate body functions	Performs experiment to demonstrate membrane transport such as diffusion and osmosis
Apply knowledge of anatomy and physiology to understand selected clinical conditions.	Appreciate the knowledge of how different organs work together to promote vital functions.	Draw a simple concept map that demonstrate the projection pain pathways.
Decipher the meaning of medical terms by analyzing the word parts.	Value the importance of using appropriate medical terminology to communicate with peers and other members of the healthcare team.	Begin using medical terminology to communicate verbally and in writing.

Course Content:

Unit I | Introduction to Medical Terminology

A. Primary Terms
B. Secondary Terms
C. Word Part Guidelines
    1. Word Root;
    2. Combining Form;

3. Suffix;
4. Prefix

D. Determining Meanings on the Basis Of Word Parts
E. Basic Medical Terms to Describe Disease Conditions
F. Using the Medical Dictionary

Unit II │ Major Themes of Anatomy and Physiology

A. The Scope of Anatomy and Physiology
    1. Anatomy – The Study of Form;
    2. Physiology – The Study of Function
B. General Anatomical Terminology
    1. Anatomical Position;
    2. Anatomical Planes;
    3. Directional Terms
C. Major Body Regions
    1. Axial Region;
    2. Appendicular Region
D. Body Cavities and Membranes
    1. Cranial Cavity and Vertebral Canal;
    2. Thoracic Cavity;
    3. Abdominopelvic Cavity;
    4. Potential Spaces

Unit III │ Cellular Form and Function

A. Concepts of Cellular Structure
    1. Cell Theory;
    2. Cell Shapes and Sizes;
    3. Basic Components of A Cell
B. The Cell Surface
C. Membrane Transport
D. Cell Interior
E. Genetics
    1. DNA and RNA – The Nucleic Acid;
    2. Genes and Their Action;
    3. Cell Cycle;
    4. Chromosomes and Heredity

F. Histology
    1. Study of Tissues:
        a) Embryonic tissues;
        b) Epithelial tissues;
        c) Connective tissues;
        d) Nervous and muscular - excitable tissues;
        e) Cell junctions, glands, and membranes;
        f) Tissue repair and degeneration

Unit IV │The Integumentary System

A. The Skin and Subcutaneous Tissue
B. Hair and Nails
C. Cutaneous Glands
D. Skin Disorders to Illustrate Above
    1. Skin Cancer;
    2. Burns

Unit V │ Skeletal and Muscular Systems

A. Bone Tissue
    1. Histology of Osseous Tissue:
        a) Bone cells;
        b) Matrix;
        c) Bone types: Compact, spongy and bone marrow;
    2. Bone Development;
    3. Physiology of Osseous Tissue;
    4. Clinical Application:
        a) Fractures and their Repair;
        b) Osteoporosis
B. The Skeleton
    1. Overview:
        a) Bones of the skeletal system;
        b) Anatomic features of the bones;
    2. The Skull;
    3. The Vertebral Column and Thoracic Cage;
    4. The Pectoral Girdle and Upper Limb;
    5. The Pelvic Girdle and Lower Limb
C. Joints
    1. Classification;

2. Movements of Synovial Joints;
3. Anatomy of Selected Diarthroses (Jar, Shoulder, Elbow, Hip. Knee);
4. Clinical Application:
    a) Temporomandibular joint (TMJ) syndrome;
    b) Knee injuries and arthroscopic surgery;
    c) Rheumatoid arthritis

D. The Muscles
1. Organization of Muscles:
    a) Muscles of the head and neck;
    b) Muscles of the trunk;
    c) Muscles of the shoulder and upper limb;
    d) Muscles of the hip and lower limb;
    e) Common athletic injuries to illustrate above;
2. Muscular Tissue:
    a) Types and characteristics;
    b) Microscopic anatomy;
    c) Nerve-muscle relationship;
    d) Behavior of skeletal muscle fibers;
    e) Muscle metabolism;
    f) Cardiac and smooth muscle;
3. Clinical Application:
    a) Muscular dystrophy;
    b) Myasthenia gravis

Unit VI │ Nervous System, Spinal Cord, Brain and Cranial Nerves

A. Overview of the Nervous System
1. Properties of Neurons;
2. Supportive Cell (Neuroglia);
3. Electrophysiology of the Neurons;
4. Synapses;
5. Neural Integration;
6. Clinical Application:
    a) Alzheimer's disease;
    b) Parkinson's disease

B. The Spinal Cord
1. Functions and Surface Anatomy:
    a) Meninges and spinal cord;
    b) Spinal tracts;
    c) The spinal nerves;

d) Anatomy of nerves and ganglia;
e) Nerve plexus;
f) Cutaneous innervation and dermatoses;

2. Somatic Reflexes:
    a) Nature of reflexes;
    b) The muscle spindle;
    c) Stretch reflex;
    d) Flexor (withdrawal) reflex;
    e) Crossed extension reflex;
    f) Tendon reflex;
3. Clinical Application:
    a) Spinal cord trauma;
    b) Pain pathways

C. The Brain and Cranial Nerves
1. Overview of the Brain:
    a) Major landmarks;
    b) Gray and white matter;
    c) Embryonic development;
2. Meninges, Ventricles, Cerebrospinal Fluid and Blood Supply;
3. The Hindbrain and Midbrain:
    a) Medullar oblongata;
    b) The pons;
    c) The Midbrain;
    d) The reticular formation;
    e) The cerebellum;
4. The Forebrain:
    a) Diencephalon;
    b) Cerebrum;
5. Integrated Functions of the Brain;
6. The Cranial Nerves;
7. Clinical Application:
    a) Cerebral palsy;
    b) Concussion;
    c) Encephalitis;
    d) Epilepsy

D. The Autonomic Nervous System and Visceral Reflexes
1. General Properties of the Autonomic Nervous System (ANS):
    a) Visceral reflexes;
    b) Division of the autonomic nervous system;

c) Autonomic output pathways;

2. Anatomy of the ANS:
    a) Sympathetic division;
    b) Adrenal glands;
    c) Parasympathetic division;
    d) Enteric nervous system;
3. Autonomic Effects on Target Organs:
    a) Neurotransmitter and their receptors;
    b) Dual innervation;
    c) Control without dual innervation;
4. Central Control of Autonomic Function;
5. Clinical Application:
    a) Drugs and nervous system

E. Sense Organs
1. Properties and Types of Sensory Receptors;
2. The General Senses;
3. The Chemical Senses;
4. Hearing and Equilibrium;
5. Vision;
6. Clinical Application:
    a) Middle-ear infection;
    b) Deafness;
    c) Cataracts

Unit VII │The Endocrine System

A. Overview of the Endocrine System
1. Endocrine Vs Exocrine;
2. Comparison of Nervous and Endocrine System;
3. Hormones

B. The Hypothalamus and Pituitary Gland
1. Anatomy;
2. Hypothalamic Hormones;
3. Anterior and Posterior Hormones;
4. Control of Pituitary Hormones

C. Other Endocrine Glands
1. Pineal Gland;
2. The Thymus;
3. The Thyroid Gland;
4. Parathyroid Glands;

5. Adrenal Glands;
6. Pancreatic Islets;
7. The Gonads

D. Hormones and Their Actions
1. Hormone Synthesis and Transport;
2. Hormone Receptors and Mode of Action;
3. Hormone Interactions and Clearance

E. Stress and Adaptation
1. Alarm Reaction;
2. Stage of Resistance;
3. Stage of Exhaustion

F. Clinical Application
1. Hyposecretion and Hypersecretion;
2. Pituitary Disorders;
3. Thyroid and Parathyroid Disorders;
4. Adrenal Disorders;
5. Diabetes Mellitus

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Group exercises
- Demonstration-return demonstration
- Case study
- Lab simulation practice
- Homework and laboratory assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/charts
- Skeleton

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Cengage Learning. *Introduction to Medical Terminology*. https://images-na.ssl-images-amazon.com/images/G/01/books/Cengage-EMS/HigherEd_titles/ITP-1111543275-medical-terminology-chap-1-alisonhb.pdf

Herr, N. Resources for Teaching Anatomy & Physiology. Retrieve from https://www.csun.edu/science/biology/anatomy/anatomy.html

Marieb, E. N. & Hoehn K. (2017). Anatomy and Physiology (6th ed.). Pearson.

Microbiology

Credits: 3

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
42 instructional hours

Prerequisites:

NA

Course Description:

This course emphasizes the interaction between microbes, the environment and humans. Content provides the foundation for applying principles of microbiology and modes transmission. Students will acquire hands-on skills in identifying microbes and determining a plan of care for the patient with microbial diseases. Emphasis will be placed on common pathogenic microorganism in West Africa with articular reference to Liberia.

Course Outcomes:

At the end of this course, student will be able to:

- Explain the evolution of microbiology
- Differentiate among the large classes of microorganisms
- Describe bacterial morphology and physiology
- Apply concepts of modes of transmission to develop primary, secondary, and tertiary prevention interventions targeting specific microbial infections
- Distinguish classes of medications targeting specific microbial infections
- Demonstrate laboratory techniques for specimen collection and handling, analysis, and determination and reporting of specific microbe(s)

Course Content:

Unit I │ Evolution of Microbiology

A. Describe Branches of Microbiology
    1. Bacteriology;
    2. Virology;
    3. Cytology;
    4. Parasitology

Unit II │ Microscopy

A. Types of Microscopes
    1. Simple Light Microscope;
    2. Phase Contrast Microscope;
    3. Fluorescent Microscope;
    4. Dark Field (Dark Ground) Microscope;
    5. Electron Microscope
B. Simple Light Microscope
    1. Parts:
        a) Single lens;
    2. Use:
        a) Gram staining;
        b) Acid fast staining

Unit III │ Morphology and Physiology of Prokaryotes and Eukaryotes

A. Prokaryotes and Eukaryotic Cells
B. Human Cell Anatomy, Structure, and Function
C. Bacterial Anatomy- Structure and Functions
D. Bacterial Growth

Unit IV │ Classification of Microorganisms

A. Atmospheric Requirement Classification
B. Morphological Classification and Arrangement
C. System Nomenclature
D. Staining Reaction Classification

Unit V │ Microbial and Parasitic Infections

A. Infections:
    1. Phases of Infection:
        a) Incubation period;
        b) Prodromal period;
        c) Acute period;
        d) Convalescence period;
    2. Modes of Transmission:
        a) Air;
        b) Feces;
        c) Water;
        d) Skin or mucus membranes;
        e) Blood and other bodily fluids;
    3. Contact:
        a) Direct;
        b) Indirect

Unit VI │ Microbial Diseases

A. Specimen Collection
    1. Respiratory Tract;
    2. Ear;
    3. Wound;
    4. Urinary Tract;
    5. Gastrointestinal;
    6. Central Nervous System;
    7. Genital Tract

Unit VII │ Brief Description, General Properties, Diseases Caused and Prevention of other Medically Important Species

A. Spirochetes
B. Rickettsia
C. Fungi
D. Parasites- Diseases, Prevention, and Life Cycle

Unit VIII │ Basic Theoretical Aspects of Immunity

A. Antigen Antibody Reactions
B. Non-Specific Immunity
C. Specific Immunity
D. Factors Affecting Immune System
E. Types of Immunity
F. Disorders Of Immunity

Unit IX │ Prevention and Control of Infections

A. Principles
B. Levels of Control
C. Universal Precautions

Unit X │ Sterilization and Disinfection/Antiseptic

A. Definitions
B. General Uses
C. Types of Heat Used
D. Antiseptics

Unit XI │ Culture/Transportation Media

A. Common Ingredients
B. Culture Methods
C. Culture and Sensitivity Methods
D. Recent Advances In Microbiology

Teaching/Learning Strategies

- Lectures/Discussions
- Demonstrations
- Laboratory

Course Expectations

The student is expected to:

- Regularly attend class and laboratory sessions
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and laboratory
- Complete all assignments and take examinations on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

VanMeter, K. and Hubert, R. (2016). *Microbiology for the Healthcare Professional*. St. Louis, MO: Elsevier.

Psychosocial Care (Psychology and Sociology)

Credits: 2

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
28 instructional hours

Prerequisites:

NA

Course Description:

This course is a combination of both psychology and sociology and designed to facilitate greater understanding of the principles of human behavior. Psychology theories and concepts of growth and development and factors influencing behavior across the lifespan. Sociology concepts will examine norms, customs and beliefs, family structures, gender, social determinants of health, United Nations Sustainable Development Goals and their effects on health-seeking behaviors and health outcomes. Enhanced interpersonal communication and counselling skills of health service providers will be stressed in order to promote utilization of services and maximum effectiveness of services provided.

Course Outcomes:

By the end of this course, students will be able to:

- Apply concepts of psychology and sociology when using the nursing process in caring for any individual, family, or community
- Explain how the Sustainable Development Goals support sociology and psychology concepts for equitable care for all individuals, families, and communities
- Use effective communication techniques in interactions with patients, other professionals, and the community

- Explain cultural beliefs and practices and their effect on the health of individuals, families, and communities

Course Content:

A. Introduction to Psychology: Striving to Understand Human Behavior
    1. Influences on Behavior;
    2. Physical Needs;
    3. Need for Self-Approval;
    4. Need for Acceptance;
    5. Emotions and Behavior;
    6. Adjustment and Patterns of Behavior
B. Behavior and Problems in Living
    1. Common Threats to Adjustment;
    2. Effects of Traumatic Events;
    3. Defense Mechanisms;
    4. Inner Conflict;
    5. Frustration
C. Becoming an Effective Health Care Provider
    1. Effects of Illness on Behavior;
    2. Coping with Patient Behavior;
    3. Human Relations and the Health Care Provider
D. Practicing Effective Communication
    1. Observing Nonverbal Behavior;
    2. Verbal Communications
E. Studying Society and Social Structure
    1. Culture;
    2. Socialization and the Life Course;
    3. Social Structure and Social Interaction;
    4. Groups and Organization;
    5. Deviance and Crime
F. Social Inequalities
    1. Social Class and Social Stratification;
    2. Global Stratification;
    3. Race and Ethnicity;
    4. Gender;
    5. Sexuality

G. Social Institutions
    1. Families and Religion;
    2. Education and Health Care;
    3. Economy and Politics

Competencies:

Knowledge	Attitudes/Behaviors	Skills
Discuss the psychosocial, developmental, spiritual, and cultural influences on effective communication	Value cultural, spiritual, and gender diversity	Evaluate the setting in which communication with patients, families, or communities are to occur
Recognize how family structures influence the health behaviors of individuals, family, and communities	Recognize social factors that promote health or hinder positive health-seeking behavior	Discuss how social determinants of health set the context for patient's perceptions of their health.
Analyze how social determinants of health and the Sustainable Development Goals inform the assessment evaluating verbal and non-verbal communication cues of individuals		Demonstrate cultural and gender sensitivity in the provision of care
Describe the effects of culture, religion and gender on health promotion		

Teaching/Learning Strategies:

- Lectures
- Simulated communication activities
    - Active listening activity
    - Non-verbal communication activity
    - Verbal communication activity
- Case studies
- Personal Values Assessment https://www.whatsnext.com/life-values-self-assessment-test/

Course Expectations:

The student is expected to:

- Regularly attend classes
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class
- Complete all assignments and take examinations on due dates

Assessment Criteria – Standard Grading System:

Quizzes	15%
Assignments	15%
Attendance	5%
Midterm Exam	25%
Final Exam	25%

References:

Andersen, M. and Taylor, H. (2015). *Sociology: The essentials, 9th ed*. Boston, MA: Cengage Learning.

Honeycutt, A. and Miliken, M. (2012). *Understanding human behavior: A guide for health care providers, 8th ed.* Clifton Park, NY: Delmar

United Nations (n.d.). Sustainable Development Goals: Knowledge platform. Retrieved from: https://sustainabledevelopment.un.org/?menu=1300

English Communication Skills

Credits: 2

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
28 instructional hours

Course Description:

This course is for students to improve their verbal and written English skills for interviewing and interacting with patients/clients, their family members and other relevant persons. At the completion of the course, learners will apply appropriate professional and scientific terminology for their communication, including medical documentation. Students will also gain and apply effective no-verbal communication techniques.

Course Outcomes:

By the end of the course, the learner will:

- Use improved basic formal English grammar, sentence structure and paragraph writing skills
- Apply basic research skills to produce correctly referenced reports
- Utilize improved reading and medical documentation skills to obtain and to record the patient/client's medical history
- Apply professional verbal and non-verbal communication techniques to establish therapeutic relationships with a patient/client or their family members to gather information

Competencies:

Knowledge	Attitudes/Behaviors	Skills
Understands principles of effective communication through various means	Accepts responsibility for communicating effectively	Uses clear, concise and effective written electronic and verbal communication
Understands different means of communication	Values different means of communication	Chooses the appropriate means of communication for a specific situation
Understands the physiological, psychosocial, development spiritual, and cultural influences on effective communication	Values mutually respectful communication Values individual cultural and personal diversity	Assesses barriers to effective communication (language, developmental level, medical conditions/disabilities, anxiety, learning styles, etc.) Makes appropriate adaptations in own communication based on patient and family assessment
Understands the nurse's role and responsibility in applying the principles of verbal and nonverbal communication	Values the therapeutic use of self in patient care Appreciates the influences of physiological, psychosocial, developmental, spiritual, and cultural influences on one's own ability to communicate	Establishes rapport with clients Actively listens to comments, concerns, and questions Demonstrates effective interviewing technique
Interprets differences in communication styles among patients and families, nurses, and other members of the health team	Values the role of each member of the healthcare team	Communicates effectively with colleagues

Discusses effective strategies for communicating and resolving conflict	Recognizes that each individual involved in a conflict has accountability for it and should work to resolve it	Contributes to resolution of conflict
Understands the principles of group process and negotiation	Appreciates the contributions of others in helping patients and families achieve health goals	Uses standardized communication approach to transfer care responsibilities to other professions whenever patients experience transition in care and across settings using SBAR
Understands the influences of different learning styles on the education of patients and families	Values different means of communication used by patients and families	Assess factors that influence the patient's and family's ability to learn, preferences for learning style, and levels of health literacy
Identifies differences in auditory, visual, and tactile learning styles	Accepts the role and responsibility for providing health education to patients and families	Incorporates facts, values, and skills into teaching plan

Course Content:

Unit I │ Language and Communication Skills

A. Effects of Language on Communication
    1. Effective communication skills;
    2. Barriers to effective communication;
    3. Two-way communication;
    4. Keys to understanding and being understood
B. Verbal Techniques
    1. Oral communication
        a) SBAR (Subjective, Objective, Assessment, Recommendations) technique;
    2. Written communication

C. Non-verbal Techniques
    1. Setting a tone conductive to optimal communication;
    2. Listening;
    3. Observation of patient/client ‘s non-verbal communication;
    4. Attention to one’s own non-verbal communication;
    5. Inter-cultural/inter-tribal sensitivity to unique non-verbal communication;
    6. Construction;
    7. Behavior;
    8. Body language
        a) Posture/gait;
        b) Facial expressions;
        c) Gestures;
    9. Touch (tactile defensiveness);
    10. Physical appearance
D. Telephone ethics/Communication
    1. Voice tone;
    2. Respecting privacy;
    3. Rephrasing;
    4. Paragraph construction;
    5. Mobile phone messaging
E. Techniques for conducting an Interview to obtain medical history
    1. Open-ended;
    2. Closed-ended;
    3. Validating questions;
    4. Reflective questions;
    5. Use of silence

Unit II │ Focused Reading Skills and Comprehension

A. Words and their meaning; vocabulary development
B. Roots, prefixes, suffixes
C. Antonyms, synonyms
D. Context clues
E. Inferences
F. Facts vs. opinions
G. Patterns of academic paragraph organication
    1. Topic;
    2. Main idea;
    3. Supporting details

H. Paraphrasing
I. Speed
    1. Scanning;
    2. Skimming
J. Analysis of simple and complex sentences
K. Paragraph contraction

Unit III │ Foundations of Grammar

A. Parts of speech
B. Sentence construction and types
C. Agreements: subject-verb, pronouns, numbers
D. Verb tenses
E. Major errors
    1. Fragments, run-on sentences

Unit IV │ Basic Mechanics

A. Capitalization
B. Punctuation
C. Spelling
D. Antonyms
E. Synonyms

Unit V │ Writing Skills

A. Documentation
B. Reports
C. Correct citations of research material
D. Presentation

Unit VI │ Overview of Library Research

A. Library system
B. Types of resource material
C. Reference material
D. Computer search
E. Bibliography/References

Unit VII │ Simple Clinical Filing System

A. Action file
B. Follow-up file
C. Correspondence file
D. Clinical skills in filing

Teaching/Learning Strategies:

- Classroom lectures
- Group exercises
- Educational games
- Demonstration
- Coaching
- Interpersonal presentation
- Homework and laboratory assignments
- Dictionary usage
- Outline materials

Course Expectations:

The learner is expected to:

- Regularly attend class and laboratory sessions
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and laboratory
- Complete all assignments and take examinations on due dates

Assessment Criteria–Standard Grading System:

- Quizzes 15%
- Assignments 15% (written and oral)
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Perelman, Leslie. (1997). *The Mayfield Handbook of Technical and Scientific Writing, Building Vocabulary Skills.* McGraw Hill: New York, NY.

Cambridge University Press. (1999). *Advanced Grammar and Use: A Self-Study Reference and Practice Book for Advanced Learners of English with Answers 3rd edition*. Cambridge University Press: New York, NY.

Comodromos, E. & Langan, P. (2018). *Building Vocabulary Skills, 5th edition*. Townsend Press: West Berlin, NJ.

Primary Health Care & Community Health Nursing: Serving Populations

Credits: 5

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 weeks instructional and 2 weeks exams)
56 instructional hours
168 clinical hours

Prerequisites:

Information, Communication, and Technology (ICT) in the Evaluation of Research, Basic Math, Fundamentals of Nursing I, Anatomy and Physiology I, Microbiology, Psychosocial Care, and English Communication Skills.

Primary Health Care Course Description:

Primary Health Care is an inclusive course covering principles of primary care, community health nursing including community-based and population-focused, epidemiology, and developing partnerships to work with and for communities. Demography and collection of census data and how this informs county and country health prioritization and health policy will be examined.

Course Outcomes:

At the end of this course, students will be able to:

- Distinguish between community-based and population focused health care
- Demonstrate the interaction of epidemiologic principles and population-focused care strategies

- Analyze population/aggregate data to make evidence-based clinical decisions for a family, community, or population.
- Use the nursing process with a family, community, or population to identify health priorities and develop a plan of care, intervention strategies, and monitoring and evaluation methods to assure success or identify difficulties with the plan of care.
- Identify social and physical determinants of health within a family, community, or population that impact primary, secondary, and/or tertiary prevention interventions

Course Content:

A. The Context of Primary Health and Community Health
    1. History and Evolution of Public Health Nursing;
    2. Community and Population Health Assessment;
    3. Epidemiology of Health and Illness;
    4. Transforming the Public's Healthcare Systems;
    5. The Home Visit;
    6. Global Health
B. Influences on Community and Population Health
    1. Economics in Health Care;
    2. Politics and Law;
    3. Health Policy;
    4. Transcultural Nursing Care in the Community;
    5. Ethics and Health;
    6. Environmental Health
C. Care of Communities and Populations
    1. Health Promotion and Wellness;
    2. Health Ministries: Health and Faith Communities;
    3. Complementary and Holistic Health;
    4. Health Education in the Community;
    5. Community and Group Communication
D. Common Community and Population Health Problems and Issues
    1. Disasters in the Community;
    2. Communicable and Infectious Disease;
    3. Sexually Transmitted Infections and HIV/AIDS;
    4. Substance Abuse and Misuse as Community Health Problems;
    5. Violence and the Community
E. Vulnerable Populations
    1. Rural, Urban, and Homeless Populations;
    2. Adolescent Pregnancy;

3. Psychiatric Care and Mental Health in the Community;
4. Chronic Illness and Disability

F. Diversity in Community Health Nursing Roles
1. Home Health and Hospice Nursing;
2. School Nursing;
3. Occupational Health Nursing

Community Health (Clinical)

Clinical Course Description:

Within a variety of community-based settings, students will apply the concepts of family, community, and/or population assessment, evaluate relevant data sources to identify health priorities, examine current health policy as it relates to their community or population of interest, and advocate for the wellness of the physical community and the populations residing within.

Clinical Course Outcomes:

At the end of this clinical course, the student will be able to:

- Build effective partnerships with clients in the community
- Conduct a comprehensive assessment of the health needs of a family, community, and/or a population using a community assessment framework
- Use the nursing process as a member of an interprofessional health care team to direct and manage the care of families, communities, and populations
- Work as an advocate for improved and/or needed heath resources
- Network with community partners in serving the health care needs of the clients in the community
- Manage health information on issues and problems related to the health of individuals, families, communities, and populations
- Plan for sustainability of implemented health promotion programs

Clinical Placement Settings:

- Health centers
- Community
- Schools
- Industries

- Water works and sewerage systems
- Information office at a hospital or clinic
- SGBV support units

Clinical Assignments:

- Community/Population health assessment
- Family health assessment
- Completion of standard documentation
- Community mobilization
- Community project planning and implementation
- Program evaluation
- Planning a community-based teaching session
- Compiling weekly/monthly statistics

Competencies:

Knowledge	Attitudes/Behaviors	Skills
Demonstrates use of community assessment framework to identify health priorities within a community or population	Values assessing heath care situations from the perspective of multiple stakeholders	Negotiates successfully for entry into family or community to conduct assessment
Implements and evaluates a community-based intervention targeting an identified community/population-focused priority	Identifies the need to use epidemiologic data to make health care decisions	Develops effective partnerships to advocate and/or promote the health of an individual, family, community, or population
		Develops a comprehensive project proposal and articulates it clearly detailing each step
		Mobilize resources required to execute a community or population intervention

Teaching/Learning Strategies:

- Lecture
- Group exercises
- Census data retrieval
- Demonstrations
- Peer-to-peer teaching
- Coaching
- Homework and clinical assignments

Course Expectations:

- Regularly attend classroom and clinical sessions
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and clinical
- Complete all assignment and examinations on due dates

Assessment Criteria- Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Nies, M. and McEwen, M. (2019). *Community/Public health nursing: Promoting the health of populations, 7th ed.* St. Louis, MO: Elsevier.

Weeks, J. Hill, A., & Stoler, J. (2013). *Spatial inequalities: Health, poverty, and place in Accra, Ghana*. New York, NY: Springer.

Pharmacology and Drug Calculations

Credits: 4

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 Instructional and 2 Exams)

56 instructional hours

Prerequisites:

Information, Communication, and Technology (ICT) in the Evaluation of Research, Basic Math, Fundamentals of Nursing I, Anatomy and Physiology I, Microbiology, Psychosocial Care, and English Communication Skills.

Course Description:

This course highlights the major drug classifications and the associated nursing care implications and patient teaching. The students will learn pharmacology by integrating knowledge of physiology, pathophysiology and the mechanism of drug action and how these translate to the nursing management of the patient on a specific drug therapy. Patient variables and their relevance to drug therapy such as health status, environmental, lifespan, gender, lifestyle, habits, and culture are discussed. They will learn the special considerations in the administration of drugs in pediatrics and geriatric patients. The students will apply knowledge of math to accurately calculate dosage and solutions using a variety of formula. The nursing responsibilities in the storage and administration of drugs will also be discussed.

Course Outcomes:

At the end of this course the student will be able to

- Apply the principles of pharmacokinetics, pharmacodynamics, pharmacogenetics and drug interactions in the nursing management of patients receiving drug therapy.
- Calculate drug dosages accurately.

- Teach patients and families regarding proper administration of medications, indications/desired effects, side effects, adverse effects and necessary monitoring when taking the drug.
- Adheres to best practices and/or evidence to maintain safety and quality with medication administration.

Competencies:

Knowledge	Attitudes/Values	Skill
Discuss the pharmacological principles of drug therapy.	Appreciate the value of safety and quality in handling, storing and administering drugs.	Accurately calculate dosages of medications and solutions using various formula.
Define pharmacokinetics, pharmacodynamics and pharmacokinetics.	Appreciate the core ethical values in providing care to patients.	Demonstrate ability to research drug information from reliable sources.
Describe the major mechanism of action of major drug categories.	Increase awareness of the medico-legal responsibility of the nurse related to drug therapy including prompt reporting of errors of omission and commission.	Interpret medication labels accurately.
Describe the indications, dosage guidelines, proper administration, side effects, adverse effects and interactions of major drug categories.	Collaborate with the health care team to ensure safety and quality in drug administration.	Demonstrate ability to teach patient and/or family about important information regarding their drug therapy.
Discuss the nursing implications related to drug administration, patient monitoring, and reporting of adverse effects.	Value the patient's right to refuse treatment including medications.	
List the rights associated with medication administration.	Value the patient's right to information to make informed consent.	
Explain the best practices to prevent medication errors.		

State the special considerations in drug therapy in pediatrics and in geriatric patients.		

Course Content:

Unit I │ Introduction to Pharmacology

A. Core Ethical Principles
    1. Patient Autonomy & Informed Consent;
    2. Beneficence & Risk-Benefit Ratio;
    3. Justice and Fairness
B. Objectives and Phases of Pharmaceutical Research
    1. Pre-Clinical Trials;
    2. Human Clinical Experimentation;
    3. Drug Approval
C. Drug Names
    1. Chemical Name;
    2. Generic Name;
    3. Brand (Trade) Name
D. Sources of Drug Information
    1. Hospital Formulary Service;
    2. Handbook of Nonprescription Drugs;
    3. Interpreting The Drug Label
E. Drug Legislation about the Dispending and Use of Drugs in Liberia
    1. Narcotic Law;
    2. Testing New Drugs
F. The Nurse's Role in Drug Therapy
    1. Collaboration with Members of the Team;
    2. Communication with Prescribing Provider and Pharmacist;
    3. Ensure Safe Drug Administration;
    4. Patient Teaching

Unit II │ Pharmocokinetics, Pharmacodynamics, and Pharmacogenetics

A. Pharmacokinetics
    1. Drug Absorption;
    2. Drug Distribution;

3. Drug Metabolism;
4. Drug Excretion

B. Pharmacodynamics
   1. Dose-Response Relationship;
   2. Onset, Peak, and Duration of Action;
   3. Therapeutic Drug Monitoring;
   4. Receptor Theory;
   5. Agonists and Antagonists;
   6. Nonspecific and Nonselective Drug Effects;
   7. Mechanisms of Drug Action;
   8. Side Effects, Adverse Drug Reactions and Drug Toxicity

C. Pharmacogenetics
   1. Biologic Variations;
   2. Tolerance and Tachyphylaxis;
   3. Placebo Effect

D. Drug Interactions
   1. Pharmacokinetic Interactions;
   2. Pharmacodynamic Interaction;
   3. Drug-Nutrient Interactions;
   4. Drug-Laboratory Interactions;
   5. Drug-Induced Photosensitivity

Unit III │ Special Considerations

A. Pediatric Considerations
   1. Pharmacokinetics:
      a) Absorption;
      b) Distribution;
      c) Metabolism (isoenzymes activity in pediatrics);
      d) Excretion;
   2. Pharmacodynamics:
      a) Drug half-lives among neonates, infants and children;
      b) Dosage form variability for pediatric age groups;
   3. Nursing Process (Family-centered collaborative care):
      a) Assessment;
      b) Nursing diagnoses;
      c) Planning and interventions;
      d) Patient/family teaching

B. Geriatric Considerations
   1. Physiologic Changes in Aging;

2. Pharmacokinetics:
    a) Absorption;
    b) Distribution;
    c) Metabolism;
    d) Excretion;
3. Pharmacodynamics:
    a) Dosage adjustments in older adults;
    b) Drug half-lives;
4. Nursing Implications:
    a) Barriers to effective drug therapy:
        (1) Lack of knowledge;
        (2) Impaired memory;
        (3) Visual and hearing impairment;
        (4) Polypharmacy;
        (5) Non-adherence;
        (6) Social issues (high cost of medications);
        (7) Decreased mobility and dexterity;
    b) Adverse drug events;
    c) Patient teaching

Unit IV │ Drug Administration and the Nursing Process

A. Safety and Quality
    1. Ten Rights of Medication Administration;
    2. Culture of Safety
        a) Know the drug before administering;
        b) Drug reconciliation;
        c) Drug storage;
        d) Drug disposal;
        e) Sharps/Needles safety;
        f) Dosage forms: crush or not to crush;
        g) High-alert medications (look-alike and sound-alike);
        h) Preventing medication errors;
        i) Patient education
B. Drug Administration
    1. Self-Administration;
    2. Forms And Routes of Drug Administration:
        a) Tablets and capsules;
        b) Liquids;
        c) Transdermals;

d) Topicals;
e) Instillations:
   (1) Eye drops & ointments;
   (2) Ear drops;
   (3) Nose drops and sprays;
f) Inhalations;
g) Nasogastric and gastrostomy tubes;
h) Suppositories
   (1) Rectal;
   (2) Vaginal;
i) Parenteral:
   (1) Intradermal;
   (2) Subcutaneous;
   (3) Intramuscular;
   (4) Intravenous;
   (5) Intraosseous

Unit V │ Drug Calculations

A. Metric versus Household System of Measurement
   1. Conversions within the Metric System;
   2. Household System Conversion;
   3. How to Read Labels
B. Methods for Drug Calculations
   1. Basic Formula;
   2. Ratio and Proportion/Fractional Equation;
   3. Dimensional Analysis;
   4. Body Weight;
   5. Body Surface Area – West Nomogram
C. Calculating Dosages of Drugs That Require Reconstitution
D. Calculating Dosages of Parenteral Drugs
   1. Injectable Preparations;
   2. Vials and Ampules;
   3. Drug Calculations in Units;
   4. Calculating Intravenous Flow Rates

Unit VI │Drug Classifications and their Pharmacokinetics, Pharmacodynamics, Contraindications, Precautions, Adverse Effects, Interactions & Nursing Implications

A. Vitamins and Mineral Replacement
    1. Fat Soluble Vitamins;
    2. Water-Soluble Vitamins;
    3. Minerals
B. Autonomic Nervous System Drugs
    1. Review: Sympathetic & Parasympathetic Nervous Systems Function;
    2. Sympathetic and Parasympathetic Responses to Drugs:
        a) Sympathetic:
            (1) Sympathomimetic;
            (2) Sympatholytic;
        b) Parasympathetic:
            (1) Parasympathomimetic;
            (2) Parasympatholytic;
    3. Autonomic Nervous System Drugs:
        a) Adrenergic Agonists:
            (1) Inactivation of neurotransmitters;
            (2) Classification of Sympathomimetics;
            (3) Epinephrine;
            (4) Albuterol;
            (5) Nursing implications and patient teaching;
        b) Central acting alpha agonists:
            (1) Clonidine;
            (2) Methyldopa;
            (3) Nursing implications and patient teaching;
        c) Adrenergic antagonists (Adrenergic blockers):
            (1) Alpha-adrenergic antagonists;
            (2) Beta-adrenergic antagonists;
            (3) Adrenergic neuron antagonists;
            (4) Nursing implications and patient teaching;
        d) Cholinergic Agonists:
            (1) Direct-acting;
            (2) Indirect-acting;
            (3) Reversible cholinesterase inhibitors;
            (4) Irreversible cholinesterase inhibitors;
            (5) Nursing implications and patient teaching;

e) Cholinergic antagonists:
(1) Atropine;
(2) Anti-parkinson-anticholinergic drugs;
(3) Nursing implications and patient teaching;

C. Central Nervous System Drugs
1. Review: Central Nervous System Function;
2. Stimulants:
a) Amphetamines;
b) Amphetamine-like drugs;
c) Anorexiants;
d) Analeptic;
e) Nursing implications and patient teaching;
3. Depressants:
a) Sedatives-Hypnotics:
(1) Barbiturates;
(2) Benzodiazepines;
b) Nursing implications and patient teaching;
4. Anesthetics;
5. Anti-Seizure Drugs:
a) Pathophysiology: Action;
b) Hydantoin;
c) Barbiturates;
d) Benzodiazepines;
e) Valproate acid;
f) Anticonvulsants and pregnancy;
g) Nursing implications and patient teaching;
6. Drugs for Parkinson's Disease and Alzheimer Disease:
a) Parkinson's Disease:
(1) Review: pathophysiology of Parkinson's Disease;
(2) Dopaminergic:
i. Carbidopa;
ii. Methyldopa;
(3) Nursing implications and patient teaching;
b) Alzheimer Disease:
(1) Review: pathophysiology of Alzheimer Disease;
(2) Anticholinesterase/Cholinesterase Inhibitors:
i. Donepezil;
ii. Memantine;
(3) Nursing implications and patient teaching;

7. Drugs for Neuromuscular Disorders and Muscle Spasms:
    a) Myasthenia Gravis:
        (1) Review: pathophysiology of myasthenia gravis;
        (2) Anticholinesterase inhibitors;
        (3) Nursing implications and patient teaching;
    b) Multiple Sclerosis:
        (1) Review: pathophysiology of multiple sclerosis;
        (2) Immunomodulators;
        (3) Nursing implications and patient teaching;

    c) Skeletal muscle relaxants:
        (1) Centrally-acting;
        (2) Direct-acting;
        (3) Nursing implications and patient teaching;

D. Drugs for Pain and Inflammation
    1. Review: pathophysiology of Pain and Inflammation;
    2. Anti-inflammatory Agents:
        a) Nonsteroidal anti-inflammatory drugs;
        b) Steroids;
        c) Disease-modifying antirheumatic drugs;
        d) Antigout drugs;
        e) Nursing implications and patient teaching;
    3. Analgesics:
        a) Non-opioid analgesics;
        b) Opioid analgesics
        c) Adjuvant therapy (for neuropathic pain);
        d) Opioid agonist-antagonists;
        e) Nursing implications and patient teaching
E. Antimicrobial Drugs
    1. Antibacterial/Antibiotics:
        a) Review: pathophysiology of infection;
        b) Penicillin;
        c) Other Beta-lactam antibacterial;
        d) Macrolides;
        e) Oxazolidinones;
        f) Nursing implications and patient teaching;
    2. Antitubercular Drugs:
        a) Review: pathophysiology of tuberculosis;

b) Anti-tubercular drugs:
(1) Ethambutol;
(2) Isoniazid (INH);
(3) Pyrazinamide;
(4) Rifampin;
(5) Drugs for multidrug-resistant tuberculosis;
c) Nursing implications and patient teaching;

3. Antifungal Drugs:
a) Review: pathophysiology;
b) Antifungal drugs:
(1) Polyenes;
(2) Azole antifungals;
(3) Antimetabolites;
(4) Echinocandins;
c) Nursing implications and patient teaching;

4. Non-HIV antiviral drugs:
a) Review: pathophysiology;
b) Non-HIV antivirals:
(1) Influenza antivirals;
(2) Herpes antivirals;
(3) Cytomegalovirus;
(4) Hepatitis antivirals;
c) Nursing implications and patient teaching;

5. Antimalarials:
a) Review: pathophysiology;
b) Antimalaria drugs:
(1) Chloroquine phosphate;
(2) Hydroxychloroquine;
(3) Mefloquine hydrochloride
(4) Primaquine phosphate;
(5) Quinine;
c) Combination antimalarial drugs:
(1) Atovaquone-proguanil combination tablet;
(2) Artemether-lumefantrine combination tablet;
d) Nursing implications and patient teaching;

6. Anthelmintic Drugs:
a) Review: pathophysiology;
b) Anthelmintic drugs:
(1) Ivermectin;

(2) Bithionol;
(3) Praziquantel;
(4) Pyrantel Pamoate;

c) Nursing implications and patient teaching;

7. Peptides:

d) Colistimethate;
e) Polymyxins;
f) Bacitracin;
g) Metronidazole;
h) Nursing implications and patient teaching

F. Immunologic Drugs:

1. Review of immune system function;
2. HIV and AIDS-Related Drugs:

a) Review: pathophysiology;
b) HIV life cycle;
c) HIV Transmission;
d) Laboratory testing;
e) Classification;
f) Indications for antiretroviral therapy;
g) Antiretroviral drugs:;
(1) Nucleoside/nucleotide reverse transcriptase inhibitors;
(2) Nonnucleoside reverse transcriptase inhibitors;
(3) Protease inhibitors;
(4) Fusion (entry) inhibitors;
(5) Chemokine Coreceptor antagonists;
(6) Integrase strand transfer inhibitors;
h) Nursing implications and patient teaching;
i) Antiretroviral therapy in pregnancy;
j) Occupational HIV exposure and postexposure prophylaxis;

3. Transplant Drugs:

a) Principle of immunosuppression;
b) Drugs for transplant rejection;
c) Nursing implications and patient teaching;

4. Vaccines:

a) Review: active, passive, community immunity;
b) Vaccine preventable diseases:
(1) Anthrax;
(2) Measles;
(3) Tuberculosis (BCG);

(4) Diphtheria, tetanus, pertussis;
(5) Haemophilus influenza B;
(6) Hepatitis A & B;
(7) HPV;
(8) Japanese encephalitis, meningococcal disease;
(9) Mumps;
(10) Pneumococcal disease;
(11) Rubella;
(12) Varicella (chicken pox);
(13) Yellow fever;
(14) Poliomyelitis;
(15) Smallpox;
(16) Typhoid;
(17) Herpes Zoster;

c) Vaccination recommendations for pediatrics and adults;
d) Vaccine safety: reporting diseases and adverse reaction
e) Nursing implications and patient teaching

G. Respiratory Drugs:
1. Review: physiology of lung function;
2. Upper Respiratory Disorders (colds, rhinitis, sinusitis):
a) Antihistamines;
b) Nasal and systemic decongestants;
c) Intranasal glucocorticoids;
d) Antitussives;
e) Expectorants;
f) Nursing implications and patient teaching;
3. Lower respiratory Disorders (COPD, Asthma, Bronchitis):
a) Sympathomimetics: Alpha and Beta2 adrenergic agonists;
b) Anticholinergics;
c) Xanthine;
d) Leukotriene receptor antagonists and synthesis inhibitors;
e) Glucocorticoids;
f) Chromolyn;
g) Mucolytics;
h) Antimicrobials;
i) Nursing implications and patient teaching

H. Cardiovascular Drugs:
1. Review: Cardiac Function;

2. Cardiac Glycosides and Inotropic Agents
    a) Digoxin;
    b) Nursing implications and patient teaching;
3. Other Drugs to Treat Heart Failure:
    a) Vasodilators;
    b) ACE inhibitors;
    c) Angiotensin II-receptor antagonists (Blockers);
    d) Diuretics;
    e) Spironolactone;
    f) Beta-blockers;
    g) Nursing implications and patient teaching;
4. Antianginal Drugs:
    a) Nitrates;
    b) Beta-blockers;
    c) Calcium channel blockers;
    d) Nursing implications and patient teaching;
5. Antidysrhythmic Drugs:
    a) Nursing implications and patient teaching;
6. Drugs to Treat Hypertension:
    a) Diuretics;
    b) Sympatholytic;
    c) Vasodilators;
    d) ACE inhibitors;
    e) Calcium channel blockers;
    f) Nursing implications and patient teaching;
7. Anticoagulants, Antiplatelets and Thrombolytics:
    a) Review: Pathophysiology of thrombus formation;
    b) Anticoagulants:
        (1) Heparin;
        (2) Low-molecular-weight heparin;
        (3) Oral anticoagulants (Warfarin or Coumadin);
        (4) Nursing implications and patient teaching;
    c) Antiplatelets:
        (1) Aspirin;
        (2) Clopidogrel;
        (3) Dypiridamole;
        (4) Nursing implications and patient teaching;
    d) Thrombolytics:
        (1) Thrombolytics;

(2) Plasminogen Inactivators;
(3) Nursing implications and patient teaching;

8. Antihyperlipidemics and Drugs to Improve Peripheral Blood Flow:
    e) Antihyperlipidemics:
        (1) Statins;
        (2) Bile acid sequestrants;
        (3) Fibrates;
        (4) Niacin;
        (5) Cholesterol absorption inhibitors;
        (6) Nursing implications and patient teaching;
    f) Drugs to improve peripheral blood flow:
        (1) Direct-acting vasodilators;
        (2) Blood viscosity reducer agent;
        (3) Nursing implications and patient teaching

I. Gastrointestinal Drugs:
    1. Review of GI Anatomy and Function;
    2. GI Tract Symptoms and Drug Therapy:
        a) Vomiting – Antiemetic agents:
            (1) Antihistamines and anticholinergics;
            (2) Dopamine antagonists;
            (3) Phenothiazine antiemetics;
            (4) Benzodiazepines;
            (5) Serotonin receptor antagonists;
            (6) Nursing implications and patient teaching;
        b) Diarrhea – antidiarrheal agents:
            (1) Opiates and opiate-related agents;
            (2) Somatostatin analogues;
            (3) Adsorbents;
            (4) Nursing implications and patient teaching;
        c) Constipation – laxatives:
            (1) Osmotic (saline) laxatives;
            (2) Stimulant laxatives;
            (3) Bulk forming, emollients and evacuants;
            (4) Nursing implications and patient teaching;
    3. Anti-Ulcer Drugs:
        a) Predisposing factors in peptic ulcer disease:
            (1) Helicobacter pylori;
            (2) Gastroesophageal reflux disease;

b) Antiulcer drugs:
(1) Tranquilizers;
(2) Anticholinergics;
(3) Antacids;
(4) Histamine 2 blockers;
(5) Proton pump inhibitors;
(6) Pepsin inhibitors;
(7) Prostaglandin Analogue Antiulcer drug;
(8) Nursing implications and patient teaching

J. Drugs for the Eye and Ear:
1. Disorders of the Eye:
a) Overview of the eye;
b) Drugs for Glaucoma and Ocular Hypertension Drugs:
(1) Beta-adrenergic blockers;
(2) Carbonic anhydrase inhibitors;
(3) Prostaglandin analogues;
c) Mydriatics and cycloplegics;
d) Nursing implications and patient teaching;
2. Disorders of the Ear:
a) Overview of the ear;
b) Drugs for ear disorders:
(1) Anti-infectives;
(2) Antihistamines and decongestants;
(3) Ceruminolytics;
c) Nursing implications and patient teaching

K. Drugs for Dermatologic Disorders:
1. Anti-Acne Drugs:
a) Topical;
b) Systemic
2. Drugs for Psoriasis:
a) TNF inhibitors;
b) Topical corticosteroids;
3. Contact Dermatitis:
a) Topical corticosteroids;
b) Calamine lotion;
4. Burns and Burn Preparations:
a) Mafenide acetate;
b) Silver sulfadiazine

L. Endocrine Drugs
    1. Review of Endocrine Functions;
    2. Drugs for Endocrine Disorders:
        a) Growth hormones – pituitary disorders;
        b) Bromocriptine mesylate –Acromegaly;
        c) Levothyroxine – primary hypothyroidism;
        d) Methimazole – hyperthyroidism;
        e) Potassium iodide – hyperthyroidism;
        f) Calcitriol – hypoparathyroidism;
        g) Calcitonin-salmon – hyperparathyroidism;
        h) Glucocorticoids – adrenocortical deficiencies;
        i) Nursing implications and patient teaching;
    3. Antidiabetics:
        a) Review: pathophysiology of diabetes mellitus;
        b) Insulin;
        c) Oral Hypoglycemic agents:
            (1) Biguanides (Metformin);
            (2) Sulfonylureas;
            (3) Thiazolidinediones;
            (4) Alpha-glucosidase inhibitors;
            (5) Miglitinides;
            (6) Dipeptidyl peptidase 4 inhibitor;
            (7) Glucagon-like peptide 1 agonist;
            (8) Selective sodium-glucose transporter 2;
        d) Nursing implications and patient teaching

M. Renal and Urologic Drugs
    1. Review: Renal and Urologic Systems Functions;
    2. Urinary Antiseptics and Anti-Infectives:
        a) Nitrofurantoin;
        b) Trimethoprim-sulfamethoxazole;
        c) Fluoroquinolones;
        d) Nursing implications and patient teaching;
    3. Urinary Analgesic, Stimulants and Antispasmodic:
        a) Phenazopyridine – urinary analgesic;
        b) Bethanechol Chloride – urinary stimulant;
        c) Oxybutynin – urinary antispasmodic;
        d) Tolterodine Titrate – muscarinic/anticholinergic;
        e) Nursing implications and patient teaching

N. Drugs Affecting the Reproductive System
    1. Female Reproductive Drugs:
        a) Review of female reproductive processes;
        b) Oral contraceptives;
        c) Other contraceptive delivery system;
        d) Nursing implications and patient teaching;
    2. Male Reproductive Drugs:
        a) Androgens;
        b) Anabolic steroids;
        c) Anti-androgen;
        d) Drugs for treatment of benign prostatic hypertrophy:
            (1) 5-alpha reductase inhibitors;
            (2) Alpha-adrenergic agents;
            (3) Phosphodiesterase-5 Inhibitors;
        e) Nursing implications and patient teaching
O. Mental and Behavioral Health Drugs
    1. Antipsychotics:
        a) Pharmacophysiologic mechanism of action;
        b) Adverse reactions;
        c) Phenothiazines;
        d) Nonphenothiazines;
        e) Atypical antipsychotics (Serotonin/Dopamine Antagonists);
        f) Special considerations in geriatrics;
        g) Nursing implications and patient teaching;
    2. Anxiolytics:
        a) Benzodiazepines;
        b) Miscellaneous anxiolytics;
        c) Nursing implications and patient teaching
P. Antineoplastic and Biologic Response Modifiers
    1. Anticancer Drugs:
        a) Review: cell cycle;
        b) Cancer chemotherapy:
            (1) Alkylating agents;
            (2) Antimetabolites;
            (3) Antitumor antibiotics;
            (4) Plant alkaloids;
            (5) Immunomodulators;
            (6) Liposomal chemotherapy;
            (7) Hormones and hormonal agonists and antagonists;

c) Nursing implications and patient teaching

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Group exercises
- Classroom presentations
- Educational games
- Homework and laboratory assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Library
- Flip chart/slides
- Internet

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Adams M. P., Holland, N. & Urban C.Q. (2016). *Pharmacology for Nurses: A Pathophysiologic Approach.* Boston: MA., Pearson.

Boyer, M.J. (2015). *Math for Nurses: A Pocket Guide to Dosage Calculation and Drug Preparation*. Walter Kluwers

Fundamentals of Nursing II

Credits: 5

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
14 instructional hours
126 clinical hours (General wards)

Prerequisites:

Information, Communication, and Technology (ICT) in the Evaluation of Research, Basic Math, Fundamentals of Nursing I, Anatomy and Physiology I, Microbiology, Psychosocial Care, and English Communication Skills.

Course Description:

The Fundamentals of Nursing II course is the continuation of the Fundamentals of Nursing I. It is designed to further the student knowledge of nursing practice. The student learns more complex knowledge, skills and values to provide safe patient care. The content for this second course includes concepts such as introduction to evidence-based care, documentation and reporting, infection control (surgical asepsis), orthopedic measures, special interventions for impaired skin integrity, pain assessment and interventions, medication administration, intravenous therapy, oxygen therapy and procedures, airway and emergency management, advanced urinary and bowel elimination procedures, care of the surgical patient, complicated wound management, palliative care and end-of-life care. The student will continue to use the nursing process in formulating care of the patient and family. There is a laboratory component to this course where the student can learn and practice skills related to these concepts. There is also a clinical component to this course which will expose the student to actual patient care. This will provide opportunities to increase their competencies in performing nursing care.

Course Outcomes:

At the end of this course the student will be able to

- Use the nursing process in planning and providing safe and quality care to clients and their family with emphasis on evidence-based interventions.
- Demonstrate beginning teaching skills to provide accurate and clear instructions to patient and family.
- Perform more advanced nursing care procedures using standards based on evidence-based practice.
- Demonstrate best practices that ensure safe medication administration.
- Demonstrate ability to report observations and document care accurately and within the confines of ethical and legal standards in the medical record.

Competencies:

Knowledge	Attitudes/Values	Skills
Develop simple care plans that address basic patient needs.	Appreciate the need for evidence-based practice in providing nursing care.	Perform nursing care procedures based on evidence-based practices and professional standards. (See list in Course Content)
Discuss the concept of pain in palliative and end-of life care.	Appreciate the role of the nurse in pain management to reduce patient suffering.	Use the nursing process in care planning and providing safe and quality patient/family care.
State legal implications in providing, reporting and recording care.	Show respect to patients, families and others.	Implement plan of care within legal, ethical, and regulatory framework of nursing.
Describe surgical aseptic techniques.	Adopt beginning professional behavior in carrying out one's duties.	Demonstrate surgical aseptic techniques.
Explain the pain theory as it relates to pain management/intervention.	Appreciate the importance of accuracy and integrity in delivering care.	Assess effectiveness of non-pharmacologic, pharmacologic and invasive pain management.
Describe the principles related to different routes of	Respect patient's expression of values, preferences and	Administer medications using best practices to ensure patient safety.

medication administered by the nurse.	needs and differing views of others.	
Describe the principles of oxygenation therapy and the variety of delivery systems	Value patient's expertise with own health and symptoms.	Perform procedures of oxygen delivery system.
Explain the stages of wound development and healing and interventions for each.	Recognize own accountability in observing infection control practices.	Perform special skin care of complex wounds.
Discuss the care of the surgical patient pre-operatively and post-operatively.	Aware of one's limitations and strengths as a member of the healthcare team and seeks assistance as needed.	Demonstrate procedures related to the care of the surgical patient pre-operatively and post-operatively.
	Appreciate the value of collaboration and team functioning in care of patients.	Demonstrate procedure related to urinary and bowel elimination.
		Perform basic life support procedure.

Course Content:

Unit I │ Introduction to Evidence-Based Practice

A. Definition
B. Why Evidence-Based Practice is Important
C. Sources of Evidence

Unit II │ Administration of Medications

A. Legal and Ethical Implications and Responsibilities
B. Sources of Drug Information
C. Forms and Routes of Administration
    1. Non-Parenteral:
        a) Oral, buccal (tablets, capsules, powders);
        b) Sublingual;
        c) Topical;
        d) Suppository & enema (vaginal or rectal);

e) Inhalants/nebulizers;

2. Parenteral:
    a) Intramuscular;
    b) Intradermal;
    c) Subcutaneous;
    d) Intravenous;
    e) Epidural

D. Safe Medication Procedure
    1. The Ten Rights;
    2. Knowledge of Indication for the Drug;
    3. Knowledge about the Drug;
    4. Techniques of Drug Administration;
    5. Patient/Family Education
E. Transcribing Medical Orders
F. Administering and Recording
G. Monitoring Reporting Desired, Side, Adverse Effects
H. Intravenous Therapy
    1. Review of Basic Principles of Fluids and Electrolytes;
    2. Initiating Intravenous Therapy;
    3. Regulating Intravenous Flow Rate;
    4. Changing Intravenous Solutions;
    5. Changing Infusion Tubing;
    6. Adding Medications to Intravenous Fluid;
    7. Administering Medication by Intermittent Infusion

Unit III │ Nutrition

A. Nutritional Assessment of the Hospitalized Patient
B. Enteral Nutrition
    1. Inserting a Nasogastric or Feeding Tube;
    2. Verifying Tube Placement;
    3. Irrigating a Feeding Tube;
    4. Administering Enteral Nutrition

Unit IV │ Sterile Technique

A. Principles of Surgical Asepsis
    1. Applying and Removing Cap, Mask and Protective Eyewear;
    2. Sterile Gloving Technique;
    3. Opening Sterile Items;

4. Sterile Draping

B. Caring For Patients under Isolation Precautions
    1. Airborne Precautions;
    2. Droplet Precautions;
    3. Contact Precautions;
    4. Protective Environment
C. Special Tuberculosis Precautions

Unit V │ Surgical Care

A. Preparing the Patient for Surgery
B. Pre-Op Teaching
C. Assessment of the Surgical Patient
D. Physiologic Factors That Place the Patient at Risk for Surgery
E. Basic Post-Operative Exercises
    1. Controlled Coughing and Splinting Of Abdomen;
    2. Incentive Spirometry (Deep Breathing and Coughing Exercises);
    3. Range Of Motion Exercises and Isometric Exercises While In Bed;
    4. Early Ambulation
F. Care and Assessment of Surgical Wound
G. Care of Drains
    1. Jackson-Pratt Drainage Bags;
    2. Penrose Drain;
    3. Hemovac Drain;
    4. Urinary Bags;
    5. Nasogastric Drainage;
    6. Measuring Intake and Output

Unit VI │ Wound Management

A. Basics of Wound Healing
B. Performing A Skin Risk Assessment and Wound Assessment
C. Staging a Pressure Ulcer
D. Applying Dressings
    1. Dry Sterile Dressing;
    2. Wet To Moist Dressing;
    3. Applying Transparent Dressing;
    4. Applying a Pressure Bandage;
    5. Applying Gauze and Elastic Bandage;
    6. Appling an Abdominal Binder

E. Removing Sutures and Staples
F. Care Planning For Different Types of Wound
G. Patient Teaching

Unit VII │ Assisting with Diagnostic and Therapeutic Procedures

A. Assisting and Preparing the Patient:
    1. Lumbar Puncture;
    2. Thoracentesis;
    3. Paracentesis;
    4. Gastric and Duodenal Suctioning;
    5. Vaginal/Pelvic Exam;
    6. Rectal Exam;
B. Preparing the Patient for Laboratory and Radiologic Exams

Unit VIII │ Oxygen Therapy and Respiratory Procedures

A. General Safety Measures in Oxygen Administration
B. Methods of Oxygen Administration
    1. Nasal Cannula;
    2. Nasal Catheter;
    3. Trans-Tracheal Oxygen;
    4. Oxygen Mask;
    5. Home Oxygen Therapy
C. Steam Therapy
    1. Cold;
    2. Hot

Unit IX │ Airway and Emergency Management

A. Oropharyngeal Suctioning
B. Airway Suctioning
C. Tracheostomy Care
D. Basic Cardiac Life Support (CPR)

Unit X │ Elimination

A. Urinary Elimination
    1. Insertion of a Straight Catheter;
    2. Insertion of an Indwelling Catheter;

3. Care and Removal of an Indwelling Catheter;
4. Care of and Emptying Indwelling Catheter or Leg Bag;
5. Measuring Residual Urine;
6. Care of Suprapubic Catheter

B. Bowel Elimination
    1. Administering an Enema;
    2. Digital Removal of Fecal Impaction;
    3. Insertion, Maintenance and Removal of a Rectal Tube
C. Gastric Intubation for Decompression
    1. Insertion, Maintenance and Removal of Nasogastric Tube
D. Ostomy Care
    1. Different Types of Ostomies;
    2. Pouching A Colostomy or Ileostomy;
    3. Pouching a Urostomy;
    4. Special Skin Care in Ostomy;
    5. Psychological Issues;
E. Patient Teaching
F. Psychological Care of Patient with Impaired Elimination
G. Reporting and Documentation

Unit XI │ Palliative and End-of-Life Care

A. Definition of Palliative Care
B. Psychological Support of Patients and Family in Grief
C. Symptom Management at the End of Life
D. Meeting the Needs of the Dying Patient
    1. Physical;
    2. Psychological/Spiritual
E. Care of Body after Death (Post-Mortem Care)
F. Responsibilities in Reporting Death
    1. Forms;
    2. Chart Documentation

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Group exercises
- Educational games
- Demonstration-return demonstration
- Lab simulation practice
- Coaching
- Homework and laboratory assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/manikins

Clinical Evaluations:

- Log book
- Skills checklists
- Documentation of Health History and Physical Exam Findings
- OSCE

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%
- OSCE Pass/Fail

References:

Curless, M.S., Ruparelia, C.S., Thompson, E., Trexler, P. A. (2018). Infection Prevention and Control. Baltimore: MD, JHPIEGO Corp.

Perry, A. G., Potter, P.A., & Ostendorf, W. (2018). Clinical Nursing Skills & Techniques (9th ed.). St. Louis: MO, Elsevier.

Anatomy & Physiology II

Credits: 3

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours
28 lab hours

Prerequisites:

Anatomy and Physiology I

Course Description:

This course is the second part of Anatomy and Physiology. The content is organized according to the organ systems in the body. Part two will cover organ systems that support body structure and mobility such as integumentary, skeletal and muscular. It also covers the systems responsible for integration and control of body functions such as the nervous, sensory and endocrine systems. The content also includes systems responsible for reproduction and development. To appreciate the importance of the content, the student will learn the immediate application to selected clinical pathology as they master anatomy and physiology.
The course includes a laboratory component to enhance learning of the structure and function of the organs of the body. The learner will carry out direct observation on anatomical models, perform exercises and testing of concepts learned to enhance learning.

Course Outcomes:

At the end of this course the student will be able to

- Identify the names and location of basic body parts.
- Describe the functions of major parts of the body.
- Describe the integration of multiple organs for support and locomotion.

- Articulate how the nervous, sensory and endocrine systems work in synchrony to integrate and control vital functions.
- Apply knowledge of organ system to selected clinical conditions.
- Analyze the pain pathways from the peripheral nerve endings to the brain and back.
- Use appropriate medical terminologies in discussion and written communication.

Competencies:

Knowledge	Attitudes/Values	Skills
Name the parts of the body and their location.	Value the knowledge of anatomy and physiology in providing safe and quality nursing care.	Using the anatomical model and/or charts, name the different parts of the body.
Describe the function of major parts of the body.	Appreciate how the body works.	Articulate the function of each organ systems.
Describe the integration of multiple organs to support and mobilize the body.	Value the importance of how multiple organs work to facilitate body functions	Perform experiment to demonstrate membrane transport such as diffusion and osmosis
Describe the range of motion of the musculoskeletal system.	Value the body's ability to maintain motion.	Demonstrate the different range of motion of major joints in the body.
Apply knowledge of anatomy and physiology to understand selected clinical conditions.	Appreciate the knowledge of how different organs work together to promote vital functions.	Create a concept map that demonstrate the projection of pain pathways in the peripheral to the central nervous system.
Decipher the meaning of medical terms by analyzing the word parts.	Value the importance of using appropriate medical terminology to communicate with peers and other members of the healthcare team.	Use appropriate medical terminology to communicate verbally and in writing.

Course Content:

Unit I │The Integumentary System

A. The Skin and Subcutaneous Tissue
B. Hair and Nails
C. Cutaneous Glands
D. Skin Disorders to Illustrate Above
    1. Skin Cancer;
    2. Burns

Unit II │ Skeletal and Muscular Systems

A. Bone Tissue
    1. Histology of Osseous Tissue
        a) Bone cells;
        b) Matrix;
        c) Bone types: Compact, spongy and bone marrow;
    2. Bone Development;
    3. Physiology of Osseous Tissue;
    4. Clinical Application;
        a) Fractures and their Repair;
        b) Osteoporosis
B. The Skeleton
    1. Overview
        a) Bones of the skeletal system;
        b) Anatomic features of the bones;
    2. The Skull;
    3. The Vertebral Column and Thoracic Cage;
    4. The Pectoral Girdle and Upper Limb;
    5. The Pelvic Girdle and Lower Limb
C. Joints
    1. Classification;
    2. Movements of Synovial Joints;
    3. Anatomy of Selected Diarthroses (jar, shoulder, elbow, hip. Knee);
    4. Clinical Application
        a) Temporomandibular Joint (TMJ) Syndrome;
        b) Knee Injuries and Arthroscopic Surgery;
        c) Rheumatoid Arthritis

D. The Muscles
    1. Organization of Muscles
        a) Muscles of the head and neck;
        b) Muscles of the trunk;
        c) Muscles of the shoulder and upper limb;
        d) Muscles of the hip and lower limb;
        e) Common athletic injuries to illustrate above;
    2. Muscular Tissue
        a) Types and characteristics;
        b) Microscopic anatomy;
        c) Nerve-muscle relationship;
        d) Behavior of skeletal muscle fibers;
        e) Muscle metabolism;
        f) Cardiac and smooth muscle;
    3. Clinical Application
        a) Muscular dystrophy;
        b) Myasthenia gravis

Unit III │ Nervous System, Spinal Cord, Brain and Cranial Nerves

A. Overview of the Nervous System
    1. Properties of neurons;
    2. Supportive Cell (Neuroglia);
    3. Electrophysiology of the Neurons;
    4. Synapses;
    5. Neural Integration;
    6. Clinical Application
        a) Alzheimer's disease;
        b) Parkinson's disease
B. The Spinal Cord
    1. Functions and Surface Anatomy
        a) Meninges and spinal cord;
        b) Spinal tracts;
        c) The spinal nerves;
        d) Anatomy of nerves and ganglia;
        e) Nerve plexus;
        f) Cutaneous innervation and dermatoses;
    2. Somatic Reflexes
        a) Nature of reflexes;
        b) The muscle spindle;

c) Stretch reflex;
d) Flexor (withdrawal) reflex;
e) Crossed extension reflex;
f) Tendon reflex;

3. Clinical Application
    a) Spinal cord trauma;
    b) Pain pathways;

C. The Brain and Cranial Nerves
1. Overview of the Brain
    a) Major landmarks;
    b) Gray and white matter;
    c) Embryonic development;
2. Meninges, Ventricles, Cerebrospinal Fluid and Blood Supply;
3. The Hindbrain and Midbrain
    a) Medullar oblongata;
    b) The pons;
    c) The Midbrain;
    d) The reticular formation;
    e) The cerebellum;
4. The Forebrain
    a) Diencephalon;
    b) Cerebrum;
5. Integrated Functions of the Brain;
6. The Cranial Nerves;
7. Clinical Application;
    a) Cerebral palsy;
    b) Concussion;
    c) Encephalitis;
    d) Epilepsy

D. The Autonomic Nervous System and Visceral Reflexes
1. General Properties of the Autonomic Nervous System (ANS)
    a) Visceral reflexes;
    b) Division of the autonomic nervous system;
    c) Autonomic output pathways;
2. Anatomy of the ANS
    a) Sympathetic division;
    b) Adrenal glands;
    c) Parasympathetic division;
    d) Enteric nervous system;

3. Autonomic Effects on Target Organs
    a) Neurotransmitter and their receptors;
    b) Dual innervation;
    c) Control without dual innervation;
4. Central Control of Autonomic Function;
5. Clinical Application
    a) Drugs and nervous system

E. Sense Organs
1. Properties and Types of Sensory Receptors;
2. The General Senses;
3. The Chemical Senses;
4. Hearing and Equilibrium;
5. Vision;
6. Clinical Application
    a) Middle-ear infection;
    b) Deafness;
    c) Cataracts

Unit IV │The Endocrine System

A. Overview of the Endocrine System
1. Endocrine vs Exocrine;
2. Comparison of Nervous and Endocrine System;
3. Hormones

B. The Hypothalamus and Pituitary gland
1. Anatomy;
2. Hypothalamic Hormones;
3. Anterior and Posterior Hormones;
4. Control of Pituitary Hormones

C. Other Endocrine Glands
1. Pineal Gland;
2. The Thymus;
3. The Thyroid Gland;
4. Parathyroid Glands;
5. Adrenal Glands;
6. Pancreatic Islets;
7. The Gonads

D. Hormones and Their Actions
1. Hormone Synthesis and Transport;
2. Hormone Receptors and Mode of Action;

3. Hormone Interactions and Clearance

E. Stress and Adaptation
   1. Alarm Reaction;
   2. Stage of Resistance;
   3. Stage of Exhaustion;

F. Clinical application
   1. Hyposecretion and Hypersecretion;
   2. Pituitary Disorders;
   3. Thyroid and Parathyroid Disorders;
   4. Adrenal Disorders;
   5. Diabetes Mellitus

Unit VI │ Reproductive System

A. Sexual Reproduction and Development
   1. Male and Female Sexes;
   2. Overview of Reproductive System;
   3. Chromosomal Sex Determination;
   4. Prenatal Hormones and Sexual Differentiation;
   5. Descent of the Gonads

B. Male Reproductive System
   1. Parts of the Male Anatomy;
   2. Function;
   3. Endocrine Control;
   4. Spermatogenesis;
   5. Clinical Application
      a) Prostate Disease

C. The Female Reproductive System
   1. Part of the Female Anatomy
      a) The Genitalia;
      b) Breasts and Mammary Glands;
   2. Puberty and Menopause;
   3. Sexual Cycle;
   4. Pregnancy and Childbirth
      a) Prenatal Development;
      b) Hormones of Pregnancy;
      c) Lactation;
   5. Clinical Application
      a) Evolution of Menopause;
      b) Endometriosis;

c) Pap Smears and Cervical Cancer

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Group exercises
- Demonstration-return demonstration
- Case study
- Lab simulation practice
- Homework and laboratory assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/charts
- Skeleton
- Microscope

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Cengage Learning. *Introduction to Medical Terminology*. https://images-na.ssl-images-amazon.com/images/G/01/books/Cengage-EMS/HigherEd_titles/ITP-1111543275-medical-terminology-chap-1-alisonhb.pdf

Herr, N. Resources for Teaching Anatomy & Physiology. Retrieve from https://www.csun.edu/science/biology/anatomy/anatomy.html

Marieb, E. N. & Hoehn K. (2017). Anatomy and Physiology (6th ed.). Pearson.

Health Assessment

Credits: 3

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
28 instructional hours
84 lab hours

Prerequisites:

Information, Communication, and Technology (ICT) in the Evaluation of Research, Basic Math, Fundamentals of Nursing I, Anatomy and Physiology I, Microbiology, Psychosocial Care, and English Communication Skills.

Course Description:

This course teaches the student knowledge, skills and attitudes to perform a comprehensive health assessment through interviewing and physical examination of the patient. The student will learn how to conduct health assessment while taking into consideration the physical, psychological, social, cultural, spiritual, functional and environmental factors that affect health and illness. The student will learn how to report findings and document on the medical record. The student will be introduced to the basic principles of adult education as they apply to patient and family teaching. This course has a clinical laboratory component where the student practices interviewing, physical examination and patient/family teaching.

Course Outcomes:

At the end of this course the student will be able to

- Conduct a comprehensive health history using therapeutic communication techniques.
- Demonstrate a complete physical assessment (head-to-toe) of an adult client to screen for abnormalities.

- Describe factors that affect the health-illness continuum such as physical, psychological, social, cultural, functional and environmental factors and how these affect the art of interviewing and the science of physical assessment.
- Differentiate between normal and abnormal findings.
- Observe appropriate safety measures during the health assessment procedures.
- Apply the basic principles of adult education in providing information and teaching to patient and family.
- Communicate assessment findings verbally and in writing.
- Have a beginning appreciation of the collaborative and team work processes in providing safe and quality health care.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe factors that affect the health-illness continuum as they affect the gathering of data during the health interview and the physical examination.	Appreciate how diverse cultural, ethnic, spiritual, and socioeconomic backgrounds influence the care of the patient & family.	Perform a comprehensive health history and physical examination of a client.
Incorporate knowledge of anatomy and physiology in the health assessment and analysis of findings.	Value the importance of accuracy in data collection in ensuring quality and safe patient care.	Demonstrate therapeutic communication techniques during the patient interview.
Differentiate between normal and abnormal findings.	Articulate the value of collaborative practice and teamwork in quality health care.	Observe appropriate safety measures during the health assessment procedures.
	Conducts self in a professional and ethical manner in dealing with the patient & family.	Communicate assessment findings through verbal means (i.e. SBAR) and in writing
		Teach patient and/or family utilizing the principles of adult education.

Course Content:

Unit I │ Introduction

A. Factors That Affect the Health-Illness Continuum
    1. Developmental Stages;
    2. Psychological and Emotional Factors;
    3. Family Factors;
    4. Cultural Factors;
    5. Environmental Factors;
    6. Spiritual Factors
B. Safety Guidelines
C. Establishing the Nurse-Patient Relationship
D. Approaches in Communicating with Patient and Family
E. Psychosocial Approaches That Promote Effective Trusting Relationship
F. Setting the Stage for the Interview
G. Ethical Values: Privacy & Confidentiality
H. Resources & Equipment Needed
    1. Flashlight/Penlight;
    2. Stethoscope;
    3. Blood Pressure Machine;
    4. Gloves;
    5. Cotton Applicators;
    6. Lubricant;
    7. Tongue Depressors;
    8. Pulse Oximetry;
    9. Weighing Scales;
    10. Tape Measure;
    11. Snellen Eye Chart;
    12. Others: Tuning Fork, Hammer, Ophthalmoscope, Otoscope

Unit II │ Comprehensive Health History

A. Components of Complete Health History
B. The Interview
    1. Therapeutic Communication Techniques:
        a) Active listening;
        b) Broad openings;
        c) Restating;

d) Clarification;
e) Reflection;
f) Informing;
g) Focusing;
h) Silence;
i) Suggesting

C. Reporting & Documentation:
    1. The Medical Record;
    2. Situation-Background-Assessment- Recommendation SBAR;
    3. Reporting;
    4. Subjective-Objective-Assessment- Plan (SOAP) Charting

Unit III │The Physical Examination

A. Preparatory Phase
    1. Preparing the Client;
    2. Preparing the Environment;
    3. Patient Positioning
B. Methods of Examination
    1. Inspection;
    2. Palpation;
    3. Percussion;
    4. Auscultation
C. Examination of the Adult Patient
    1. The General Survey;
    2. Vital Signs – Temperature, Pulse, Respiration, BP, Pain;
    3. Level of Consciousness;
    4. Skin Assessment;
    5. Head and Neck Assessment;
    6. Thorax & Lung Assessment;
    7. Cardiovascular Assessment;
    8. Abdominal Assessment;
    9. Genitalia and Rectal Assessment;
    10. Musculoskeletal Assessment;
    11. Neurological Assessment
D. Analysis of Findings
E. Reporting & Documenting Findings
    1. The Subjective Data;
    2. The Objective Data

F. Other Specialized Assessment
    1. Nutritional Assessment;
    2. Mental Status and Cognitive Assessment;
    3. Domestic Violence

Unit IV │ Patient & Family Teaching

A. Principles of Adult Education
B. Learning Needs Analysis
C. Providing Patient/Family Teaching
D. Evaluating Teaching
    1. Teach-Back Method

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Group exercises
- Educational games
- Demonstration-return demonstration
- Lab simulation practice
- Coaching
- Homework and laboratory assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/manikins

Clinical Evaluations:

- Log book
- Skills checklists
- Documentation of Health History and Physical Exam Findings
- OSCE

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%
- OSCE Pass/Fail

References:

Bickley, L.S. (2016). Bate's Guide to Physical Examination and History Taking (12th ed.) North American Edition: Wolter's Kluwer.

Jarvis, C. (2019). Physical Examination and Health Assessment (8th ed.). Baltimore: MD, Elsevier.

Nutrition

Credits: 2

Placement within the Curriculum:

Year 2, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
28 instructional hours

Prerequisites:

Primary Health Care & Community Health Nursing: Serving Populations, Pharmacology & Drug Calculations, Fundamentals of Nursing II, Anatomy and Physiology II, and Health Assessment.

Course Description:

This course examines the basic concepts of nutrition. Students will examine the influence of nutrition on health across the lifespan. Planning care using the nursing process and evidence-based nutrition interventions will provide students with the ability to promote a healthy life and support patients with health conditions with nutritional implications.

Course Outcomes:

At the end of this course, students will be able to:

- Discuss the basic components of nutrition and their impact on the human body
- Assess a patient's diet to determine gaps in nutritional intake
- Identify local food sources that promote nutritional well-being
- Discuss safe food storage and handling practices based on patient's environment
- Identify nutrition interventions for select clinical conditions including pregnancy, infancy, childhood, cardiovascular disease, diabetes, kidney and liver disease

Course Content:

A. Overview of Nutrition and Health
B. Digestion and Absorption
C. Carbohydrates
D. Essential Nutrients
    1. Carbohydrates;
    2. Lipids/Fats;
    3. Protein;
    4. Vitamins;
    5. Minerals;
    6. Water;
    7. Fiber
E. Energy Balance and Body Composition
    1. Physical Activity and Immobility;
    2. Measurements of Body Composition;
    3. Hunger, Satiation, and Satiety;
    4. Environmental Cues
F. Nutrition Across the Lifespan
    1. Pregnancy and Lactation;
    2. Infancy, Childhood, and Adolescence;
    3. Later Adulthood
G. Care Of Patients Experiencing Nutritional Disorders
    1. Nutrition Care and Assessment;
    2. Diet-Drug Interactions;
    3. Enteral and Parenteral Nutrition Support;
    4. Metabolic and Respiratory Disorders;
    5. Upper Gastrointestinal Tract;
    6. Lower Gastrointestinal Tract;
    7. Liver Diseases;
    8. Diabetes – Type I And Type II;
    9. Cardiovascular Diseases;
    10. Renal Diseases;
    11. Cancer and HIV Infection

Competencies:

Knowledge	Attitudes/Behaviors	Skills
Identify essential nutrients	Recognize the biases that may influence patient's dietary choices and body composition	Assess energy balance and body composition for each patient
Distinguish essential nutrient needs across the lifespan	Discuss the influence of individuals, families, and communities attitudes toward nutrition and food and its impact on nutritional behaviors	Construct a 24 hour dietary recall and analyze results
Evaluate physiologic disorders and the relationship with nutrition		Support patients in navigating the health care system for nutrition supplies

Teaching/Learning Strategies:

- Lecture
- Case studies
- Peer to peer learning: Nutrition assessment and evaluation (24 hour dietary recall)
- Simulation: Shopping and meal planning for a patient with a physiologic condition with nutritional implications
- Breast feeding simulation

Course Expectations:

The student is expected to:

- Regularly attend classes
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class
- Complete all assignments and take examinations on due dates

Assessment Criteria – Standard Grading System:

Quizzes	15%
Assignments	15%
Attendance	5%
Midterm Exam	25%
Final Exam	40%

References:

DeBruyne, L, and Pinna, K. (2017). *Nutrition for health and health care, 6th ed*. Boston, MA: Cengage Learning.

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Obstetrics Maternity Nursing I

Credits: 4

Placement within the Curriculum:

Year 2, Semester 1

Duration:

16 weeks (14 instructional and 2 exams)
28 instructional hours
126 clinical hours

Prerequisites:

Primary Health Care & Community Health Nursing: Serving Populations, Pharmacology & Drug Calculations, Fundamentals of Nursing II, Anatomy and Physiology II, and Health Assessment.

Course Description:

This is the first part of a two-part clinical obstetrical maternity nursing course. This course provides a foundational understanding of the principles of safe motherhood and basic care to the pregnant and laboring woman and her family. It is also designed to teach the student about reproductive health and family planning (FP) and adolescent sexual and reproductive health. This course helps prepare the student to provide FP counseling and reproductive health care services to adolescents.

Course Outcomes:

At the end of this course the student will be able to

- Explain the concept of safe motherhood and the millennium development goals.
- Describe antenatal factors affecting maternal and newborn mortality and morbidity.
- Apply knowledge of anatomical and physiological principles to the nursing care of women during pregnancy.
- Apply principles of the nursing process to the care of women during pregnancy
- Apply principles of communication, health education and counseling to the care of women and families during pregnancy.

- Assess the health of the mother and the fetus through promotion of optimal nutrition throughout pregnancy.
- Provide family planning and reproductive health care services to women including adolescents.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe growth and development related to sexuality, sexual development and sexual activity.	Value the importance of knowing growth and development related to sexuality, sexual development and sexual activity.	The nurse has the skill and/or ability to take a comprehensive health and obstetric, gynecologic and reproductive health history
Analyze cultural norms and practices surrounding sexuality, sexual practices, marriage and childbearing	Increase awareness of the importance of cultural norms and practice surrounding sexuality, sexual practices, marriage and childbearing.	Engage the woman and her family in preconception counseling, based on the individual situation, needs and interests
Review female and male anatomy and physiology related to conception and reproduction.	Is responsible and accountable for clinical decisions and actions	Performs a physical examination, including clinical breast examination, focused on the presenting condition of the woman
Explain the principles of screening methods for cervical cancer, (e.g., visual inspection with acetic acid [VIA], Pap test, and colposcopy	Acts consistently in accordance with professional ethics, values and human rights	Performs a physical examination, including clinical breast examination, focused on the presenting condition of the woman
Discuss the concept of safe motherhood and the millennium development goals	Appreciate the value of good prenatal care to the mother and baby.	Apply knowledge of anatomical and physiological principles to the care of women throughout pregnancy

Describe antenatal factors affecting maternal and newborn mortality and morbidity	Increase awareness of the rate of maternal and newborn mortality and morbidity.	Utilize principles of health assessment in conducting health assessment for women during pregnancy
Describe the importance of promoting optimal nutrition throughout pregnancy to support the well-being of the mother and the fetus.	Appreciate the role of good nutrition throughout pregnancy for the mother and the baby.	Promote optimal nutrition throughout pregnancy to support the well-being of the mother and the fetus.
Describe the importance communication, health education and counseling to the care of women and families during pregnancy	Increase awareness of the importance of continuous communication and effective health education and counseling to the care of women and families during pregnancy.	Provide health education and counseling to women and families during pregnancy
Describe the signs and symptoms of prenatal complications.	Value the importance of early recognition of prenatal complications.	Refer women experiencing prenatal complications
Describe family and reproductive health concepts.	Acts consistently in accordance with standards of practice.	Identify the disorders of the female and male reproductive system.
Explain the investigations to confirm gynecological conditions	Maintains/updates knowledge and skills, in order to remain current in practice.	Identify major reproductive health problems including adolescent reproductive health problems.
Describe gynecological procedures and surgical interventions		Identify problems adolescents face in obtaining health services and provide adolescent-friendly health services
Explain reproductive tract infections and infertility		Counsel clients on all methods of family planning using the Balanced Counseling Strategy (BCS) and the WHO Medical Eligibility Criteria (MEC)
Discuss harmful practices that impact reproductive health		Demonstrate skills in administering various methods of Family planning, including. injectable, IUCD and Jadelle

Explain basic concepts related to reproductive health, including, adolescent health and identify major reproductive health problems and adolescent health problems.		Refer women experiencing family planning complications.
Describe essential factors necessary for the provision of adolescent-friendly health services		
Describe the various methods of Family planning and skills needed in providing all methods of family planning chosen by clients		
Describe factors affecting maternal and newborn mortality and morbidity related to birth spacing		

Course Content:

Unit I │ Reproductive Health

A. Overview of the Anatomy and Physiology of the Male and Female Reproductive Systems
B. Philosophy and Concepts of Reproductive Health
    1. Concept of Human Sexuality;
    2. Roles of the Father, Mother, Children, Significant Other in Reproductive Health;
    3. Health Status of Women, Girl-Child Education and Gender Discrimination Effects;
    4. Sexual Deviations and Problems of Sexuality;
    5. Family Life Education, Responsibility and Safe Sex;
    6. Factors That Could Influence Reproductive Health:
        a) Cultural - norms and values;
        b) Socio-economical;
        c) Religious;
        d) Educational;
        e) Political, etc.

C. Family and Reproductive Health Concepts
    1. Reproductive Health:
        a) Description;
        b) Components;
        c) Definition;
        d) The role of the nurse
D. Reproductive Health of the Well Woman
    1. Breast Health;
    2. Cervical Cancer Screening;
    3. Exercise;
    4. Nutrition;
    5. Sexuality;
    6. Components:
        a) Safe Motherhood, Including Essential Neonatal Care (EmONC);
        b) EmONC signal functions;
        c) Basic EmONC centers must have:
            (1) IV/IM antibiotics;
            (2) IV/IM anticonvulsants;
            (3) IV/IM oxytocins /AMTSL;
            (4) Assisted vaginal delivery;
            (5) Manual removal of placenta;
            (6) Removal of retained products of conception/MVA;
            (7) Newborn care and resuscitation of newborn;
        d) Comprehensive EmONC centers must have:
            (1) All Basic EmONC Services plus:
                i. Cesarean section;
                ii. Blood transfusion;
                iii. Newborn care;
        e) Family planning information and services;
        f) Prevention and management of infertility and sexual dysfunction in both men and women;
        g) Prevention and management of complications of abortion;
        h) Provision of safe abortion services, where the law so permits;
    7. Adolescent Sexual and Reproductive Health:
        a) Description;
        b) Major sexual and reproductive health problems include the following:
            (1) Unwanted pregnancies;
            (2) Unsafe abortion;
            (3) Pregnancies spaced too closely;

(4) STIs, including HIV/AIDS;
(5) Sexual and domestic violence/exploitation;
(6) Some couples also suffer from infertility, the inability to conceive a child;

c) Barriers:
(1) Fear that their parents will find out;
(2) Difficulty negotiating condom use with male partners;
(3) Fear of violence from their partners;
(4) Concerns about side effects of birth control;
(5) Peer pressure to engage in sexual intercourse;
(6) Expectations for women to marry and begin childbearing at an early age;

d) Characteristic of adolescent-friendly reproductive health services:
(1) Assurances of privacy and confidentiality: young people must feel confident that their important and sensitive concerns are not overheard or retold to other persons;
(2) Accurate, easy-to-understand information;
(3) Gender-specific information: service specifically for men and for women;
(4) Information addressing women's less equal power status in many relationships;
(5) Peer education and outreach;
(6) Activities to build skills in communication and negotiation;
(7) Involvement by youth in program design and operation;
(8) Free or affordable services;
(9) Easy and confidential registration, and short waits;
(10) Consultation with or without an appointment;
(11) Treating adolescents with equal care an respect as other clients;
(12) Encourage community and parental support;
(13) Allowing young couples to come to the clinic together to seek services and be counseled;
(14) Publicity so that adolescents know what services are offered at the clinic and must be aware that they will be treated respectfully and confidentially

E. Family Planning Technology
1. History of Family Planning in Liberia;
2. Importance of Family Planning;
3. Family Planning Compliance with Statutory and Policy Requirements:
a) Voluntarism;

b) Informed choice;
c) Tiahrt Amendment:
(1) Spacing children improves health of mother and children;
(2) Problems caused by lack of family planning;
(3) Healthy timing and spacing of pregnancy (HTSP);
(4) Key messages;
d) The role of health/family planning education;
e) Family planning counseling;
f) Balanced Counseling Strategy;
g) WHO Medical Eligibility Criteria (MEC);
h) Methods of family planning: description, mechanism of actions, mode of administration, advantages and disadvantage:
(1) Fertility Awareness Methods/Natural family planning:
i. Cycle beads;
ii. LAM;
(2) Condoms (male);
(3) Condoms (female);
(4) IUCDs - Postpartum family planning (PPFP) and IUD (PPIUD);
(5) Implants/Jadelle;
(6) Hormonal;
(7) Emergency contraception;

4. Surgical Methods:
a) Bilateral tubal ligation;
b) Vasectomy;
c) Safe abortion;
d) Complications;
e) Post abortion care

F. Disorders of the Reproductive System
1. Disorders of the Female Reproductive System:
a) Review of anatomy and physiology of female reproductive system;
b) Review of menstrual cycle:
(1) Congenital abnormalities – imperforate vagina/hymen bicornuate uterus and hermaphrodite;
c) Disturbances of menstruation, menopause, etc.;
d) Vulva: inflammation, cyst, tumor, varicose veins;
e) Vagina: inflammation, abnormalities, vesicovaginal and rectovaginal fistula;
f) Cervix: inflammation, polyps, irritation, erosion, cancer;
g) Uterus: abnormality, endometritis, endometriosis, fibroids, cancers;

h) Fallopian tubes: inflammation, abnormalities – long and short tube; cul-de-sac in the tube, absence, ectopic pregnancy, salpingitis, etc.;
i) Ovaries: inflammation, cyst, cancer;
j) Pelvic floor: displacement – uterine cystocoele, rectocoele and prolapse;
k) Pelvic cavity: pelvic inflammatory diseases, etc.;
l) Breast: inflammation, abnormalities, engorgement and cancer;
m) Breast self-examination (BSE);

G. Other Problems Affecting Women's Health:
1. Dysmenorrhea;
2. Menorrhagia;
3. Metrorrhagia;
4. Amenorrhea;
5. Endometrial Carcinoma;
6. Cervical Carcinoma;
7. Breast Cancer;
8. Disorders of the Male Reproductive System:
a) Undescended testis;
b) Hypospadias;
c) Epispadias;
d) Oligospermia;
e) Azospermia;
f) Hermaphrodite;
9. Investigations, Procedures and Surgical Interventions for Disorders;
10. Gynecological Positions and Procedures:
a) Examination and diagnostic investigations – swabs, pap smear, ultrasonography abdominal, transvaginal, etc.;
11. Interpretation of Radiological and Laboratory Results;
12. Surgical Procedures – Dilation and Curettage, Hysterotomy, Myomectomy, Hysterectomy, Salpingectomy, Oophorectomy, Mastectomy, etc.;
13. Role of the Nurse in the Care of Client Undergoing Surgical Procedures

H. Reproductive Tract Infection and Infertility

I. Sexually Transmitted Infections – Male and Female
1. STI Information and Counseling; Male and Female;
2. Comprehensive Syndromic STI Case Management with the Seven Syndromes Identified in the WHO Protocol;
3. Prevention and Control of STI among Adolescents and Young Adults

J. HIV Infection and Acquired Immune Deficiency Syndrome (AIDS)
1. Prevalence of HIV/AIDS – Global, National;

2. Prevention of HIV Infection Including ABCD of Prevention, Prevention of Mother-to-Child Transmission (PMTCT), Universal Precaution and Post Exposure Prophylaxis (PEP);
3. Burden of the Disease on the Individual, Family And Community;
4. Opportunistic Infections;
5. Overview on National Counseling Technique (CT)/Guidelines;
6. HIV Counseling and Testing

K. Management of HIV Infection
1. Drug Therapy – Antiretroviral Drugs;
2. Nutrition and Family Support;
3. Support Groups;
4. Stigmatization of PLWHA

L. Infertility
1. Causes: Male and Female;
2. Prevention and Management;
3. Sexual Dysfunctions: Prevention and Management in Male and Female

M. Issues in Reproductive Health
1. Complications of Unsafe Abortion;
2. Postabortion Care

N. Customs and Traditions Affecting the Health of Reproductive Women
1. Religious Beliefs;
2. Cultural Practices;
3. Tribes and Taboos;
4. Ethnicity in Liberia

O. Harmful Traditional Practices
1. Definition and Types (Female Genital Mutilation, Premature Marriage, Forced Marriage);
2. Consequences of Harmful Practices;
3. Female Genital Mutilation (FGM);
4. Types;
5. Effects on Pregnancy, Labor And Delivery;
6. Strategies for Elimination;
7. Domestic and Sexual Violence against Women and Men.

Unit II │ Safe Motherhood

A. Safe Motherhood and the Millennium Development Goals (MDGS)
1. Safe Motherhood and the Millennium Development Goals (MDGs);
2. Millennium Development Goals (MDGs) (4 & 5);
3. Calculating Perinatal Statistics;

4. International Midwifery Competencies and Practice Standards;
5. Regional Midwifery Competencies and Practice Standards

B. Maternal Mortality
   1. Significance of the Problem;
   2. Present Rate in Liberia;
   3. Contributing Factors:
      a) Three delays;
      b) Delay in deciding to seek care:
         (1) Failure to recognize complications;
         (2) Acceptance of maternal death;
         (3) Low status of women;
         (4) Socio-cultural barriers to seeking care;
      c) Delay in reaching care:
         (1) Poor roads, infrastructure, transport means, poor organization;
      d) Delay in receiving care:
         (1) Inadequate facilities, supplies, personnel;
      e) Poor training of personnel;
      f) Lack of trained medical personnel;
      g) Lack of transportation;
      h) TTMs not adequately trained as to when to refer;
      i) Poverty;
      j) Others

C. History of Maternity Care in Liberia
D. Maternal Health in Liberia
E. A Global Perspective on Obstetrical Nursing
F. The Role of the Obstetrical Nurse
G. Direct and Indirect Causes of Maternal Morbidity/Mortality
   1. Hemorrhage;
   2. Infections;
   3. Pre-Eclampsia/Eclampsia;
   4. Social Cultural

H. Maternal and Infant Mortality Rate
   1. Maternal-Infant;
   2. Morbidity Rate;
   3. Birth Rate;
   4. Fertility Rate;
   5. Perinatal Mortality Rate

Unit III │ Application of Reproductive Anatomy and Physiology to Antenatal Care

A. Pregnancy and Body Changes in Pregnancy
    1. Reproductive organs;
    2. Cardiovascular;
    3. Respiratory;
    4. Renal;
    5. Gastrointestinal;
    6. Musculoskeletal;
    7. Neurological;
    8. Psychosexual
B. Physiology of Conception
C. Fetal Development/Circulation
D. Placental Development

Unit IV │ Basic Obstetrical Nursing Principles

A. Applying the Nursing Care Process to the Pregnant Woman
    1. Supporting Pregnancy as a Physiologic Process;
    2. The Importance of Preconception Care;
    3. Screening for Complications;
    4. The Importance of Antenatal Care;
    5. Common Terminology Used in Obstetrical Care

Unit V │ Maternity Care in the First Trimester

A. Focused Antenatal Care
    1. Diagnosis of Pregnancy;
    2. Estimating Gestational Age;
    3. Initial Prenatal History;
    4. Physical Assessment and Findings;
    5. Initial Prenatal Physical Examination;
    6. Laboratory Testing;
    7. Education And Counseling of Woman and Family;
    8. Nutritional Guidance;
    9. Managing Common and Mini Discomforts

B. Preventing, Screening for and Managing Acute and Chronic Diseases Affecting Pregnancy
    1. Hypertension;
    2. Diabetes;
    3. TB;
    4. PMTCT:
        a) Definition;
        b) Mother-to-child transmission of HIV (MTCT);
        c) Risk of MTCT during pregnancy, labor and delivery, and breastfeeding;
        d) Ways to reduce risk of MTCT;
        e) Use of antiretroviral medicines for mother and infant;
        f) Condom use (male and female)
            (1) How to use a male and female condom using models;
        g) Women's nutrition and supplementation (multivitamin, iron/folate);
        h) Counseling and testing services:;
        i) Prophylaxis or ARV treatment (if available and indicated or referral);
    5. Malaria in Pregnancy:
        a) Three elements of WHO malaria prevention and control in pregnancy:
            (1) Use of insecticide-treated nets (LLTNs);
            (2) Intermittent preventive treatment (IPTp) WHO malaria in pregnancy (MIP) strategy;
            (3) Treatment regimen- Case management of women with symptoms and signs of malaria;
        b) Prevention of Malaria in;
        c) LLTNs;
        d) IPTp:
            (1) The use of sulfadoxine-pyrimethamine (SP) for IPTp, including dosage, timing and contraindications;
            (2) The first IPTp-SP dose should be administered as early as possible during the 2nd trimester of gestation (after quickening);
            (3) Each SP dose should be given at least 1 month apart;
            (4) The last dose of IPTp with SP can be administered up to the time of delivery, without safety concerns;
            (5) IPTp should ideally be administered as directly observed therapy (DOT);
            (6) SP can be given either on an empty stomach or with food;

(7) Folic acid at a daily dose equal or above 5 mg should not be given together with SP as this counteracts its efficacy as an antimalarial;
(8) SP should not be administered to women receiving cotrimoxazole prophylaxis;
(9) Dispelling myths;

e) IPTp with SP can be taken on an empty stomach or after food;
f) IPTp with SP is safe up until delivery:
(1) Contraindications of SP;

6. Treatment Regimen:
a) Uncomplicated malaria in pregnant women:
(1) Signs and symptoms:
i. Fever;
ii. Shivering/chills/rigors;
iii. Headaches;
iv. Muscle/joint pains;
v. Nausea/vomiting;
vi. False labor pains;
b) Severe malaria in pregnant women:
(1) Signs and symptoms:
i. Signs of uncomplicated malaria PLUS one or more of the following:
- Confusion/drowsiness/coma;
- Fast breathing, breathlessness, dyspnea;
- Vomiting every meal/unable to eat;
- Pale inner eyelids, inside of mouth, tongue, and palms;
- Jaundice;

c) Case management of MIP:
(1) The goal of malaria treatment during pregnancy:
i. To completely eliminate the infection because any amount of parasites in the blood can affect the mother or fetus;
d) Determine severity;
e) Uncomplicated: Manage according to local protocol;
f) Severe:
(1) Refer immediately to higher level of care;
(2) Consider giving pre-referral treatment or first dose of antimalarial if available and provider is familiar with its use;
g) Selection treatment is based on:
(1) The gestational age of the pregnancy;

(2) Availability of approved drugs;

h) Treatment of uncomplicated malaria:
   (1) For second and third trimesters, ACTs should be the first-line treatment if available and in line with local protocol;
   (2) For uncomplicated malaria in the 1st trimester and for severe malaria in any trimester, quinine is the drug of choice;
   (3) First trimester:
      i. Quinine 10 mg salt/kg body weight three times daily + clindamycin 10 mg/kg body weight twice daily for 7 days;
      ii. If clindamycin is not available, use quinine only;
      iii. ACT can be used if it is the only effective treatment available;
   (4) Second and third trimester:
      i. Use the ACT known to be effective in the country/region;
      ii. Artesunate and Amodiaquine;
      iii. Artemether-Lumefantrine;
      iv. Dihydroartemisinin-Piperaquine OR;
      v. Artesunate + clindamycin (10 mg/kg body weight twice daily) for 7 days, OR;
      vi. Quinine + clindamycin for 7 days;
i) Treatment for Complicated/Severe Malaria;
j) Stabilized and referral to higher level if not at that level;
k) Management of Convulsions or Fits:
   (1) Determining causes of convulsions - malaria or eclampsia;
   (2) Management according to determination;
l) Severe malaria: pre-referral treatment:
   (1) Full dose of parenteral anti-malarials;
m) First trimester:
   (1) Quinine is the drug of choice, but in its absence artemether may be used;
n) Second and third trimesters:
   (1) IM or IV artesunate is the first and artemether the second option;
   (2) Rectal administration of artesunate or artemether may be given if injections are not possible;
o) Referral:
   (1) Preparation;
   (2) Note;
   (3) Accompany;

p) Pharmacovigilance/adverse drug reaction monitoring:
   (1) SP;
   (2) Artesunate and Amodiaquine;
   (3) Artemether/Lumefantrine;
   (4) Quinine;
q) Reporting:
   (1) When, where, how;
r) Adherence counseling:
   (1) Why;
   (2) Steps:
      i. Ideally, show a sample packet of the medicine to the client;
      ii. Ask the client what she knows about the medicine and how it works;
      iii. Remind the client that malaria is a serious disease;
      iv. Ask what she knows about the effects of MIP

C. Screening for Early and Late Pregnancy Complications and High Risk Conditions
   1. Spontaneous Abortion;
   2. Hyperemisis;
   3. Premature Labor;
   4. Fetal Growth Restriction;
   5. Pre-Eclampsia;
   6. Macrosomia;
   7. Postdates Pregnancy;
   8. Placenta Previa;
   9. Abruptio Placentae
D. Documentation of Care

Unit VI │ Maternity Care during the Second and Third Trimester

A. The Interm Prenatal History
B. Physical Assessment Findings and Care
   1. Fundal Height;
   2. Fetal Position and Presentation;
   3. Fetal Heart Rate;
   4. Cervical Dilation and Effacement;
   5. Extremities;
   6. Blood Pressure;
   7. Routine Medications and Vaccine (iron folate, multivitamin, mebendazole, TT);

8. Routine lab

C. Documentation of Findings and Care

Clinical Component of the Course:

This course is an introductory experience in the provision of comprehensive medical care and counseling services to the elderly, adult and adolescent female patients. Obstetrical conditions and gynecological problems commonly encountered will be the focus of this clinical experience.

Clinical Outcome Competencies:

At the end of this course, the learner will be able to:

- Apply concepts from reproductive anatomy and physiology to care of a woman in labor
- Conduct safe deliveries
- Identify signs of obstetric/gynecological diseases and conditions in women
- Manage obstetric and gynecological diseases and conditions in women

Clinical Placement:

- Female wards
- Outpatient department
- Community

Clinical Skills:

- Teaching women and mothers about safe motherhood
- Assessing postpartum mothers and neonates
- Preventing complications in pregnancy, labor and delivery
- Documenting findings and interventions

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Teaching/Learning Strategies:

- Classroom presentations
- Case studies
- Role plays
- Group exercises
- Visual aid
- Educational games
- Demonstration and return demonstration
- Coaching
- Homework and laboratory assignments
- Care plan

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/charts
- Skeleton

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Coad J. & Dunstall M. (2011). Anatomy and Physiology for Midwives, 3rd edition, Elsevier Ltd.

Davidson, M., London, M. & Ladewig P. (2019). Olds' Maternal-Newborn Nursing and Women's Health Across the Lifespan (11th ed.), Pearson

Tarning, J. (2016). Treatment of malaria in pregnancy. *New England Journal of Medicine, 374:981-982*. DOI: 10.1056/NEJMe1601193.

Medical-Surgical Nursing I

Credits: 4

Placement within the Curriculum:

Year 2, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
42 instructional hours
126 clinical hours

Prerequisites:

Primary Health Care & Community Health Nursing: Serving Populations, Pharmacology & Drug Calculations, Fundamentals of Nursing II, Anatomy and Physiology II, and Health Assessment.

Course Description:

This course is the first part of the two-part course on medical and surgical nursing practices. It provides a theoretical foundation and evidence-based and/or best practices in the care of the patient with selected disease conditions. The focus will be on the biophysical and psychosocial concepts in nursing practice which covers homeostasis, stress and adaptation, and perioperative concepts. It will lay down the foundation for pain management, fluids and electrolytes disturbances, and the care of the older adult. Major organ dysfunctions covering integumentary, musculoskeletal, digestive and gastro-intestinal, kidney and urinary, hematologic, and reproductive systems will be discussed within the framework of the nursing process that includes patient education and psychosocial care.
This course includes a clinical component to provide opportunity to apply knowledge learned in the classroom to clinical situations. The use of the nursing process will be emphasized in the care of patients with medical-surgical conditions.

Course Outcomes:

At the end of this course the student will be able to

- Establish a trusting relationship with the patient/family.
- Provide care of the adult patient with selected medical and surgical dysfunction with best practices and evidence.
- Use the nursing process as a framework in planning, providing and evaluating care of the patient and family.
- Apply biophysical and psychological concepts related to homeostasis, stress and adaptation, chronic illness, disability and perioperative care.
- Demonstrate psychological support of the patient/family in the provision of care through use of effective communication techniques, and non-verbal and culturally sensitive behavior.
- Teach patient/family as an integral part of nursing care to support self-care, health maintenance and promotion, and continuity of safe care at home.
- Demonstrate beginning skills of collaboration and teamwork with other members of the healthcare team through communication, appropriate and timely reporting and recording of care in the medical record.
- Apply knowledge of word parts to decipher the meaning of medical terms.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe the components of the nursing process.	Appreciate the value of an organized framework such as the nursing process in providing care.	Demonstrate assessment skills in providing care of the patient with medical-surgical dysfunction.
Integrate knowledge of anatomy and physiology, psychosocial concept, patient teaching in care planning.	Respect the patient.	Collect subjective and objective data through appropriate interviewing and physical examination.
Describe the assessment of the patient with medical-surgical dysfunction through appropriate interviewing and physical examination.	Value the importance of establishing a trusting relationship with the patient.	Formulate a plan of care that integrates data and best practices and/or evidence.
Interpret subjective and objective data to formulate a nursing diagnosis, or an impression, or conclusion.	Accept the role and responsibility in providing care and health education to patients and families.	Provide nursing care based on evidence and/or best practices rooted consistent with psychosocial concepts
Discuss the nursing interventions from evidence and best practices for	Respect the patient.	Assess the outcomes of interventions.

selected medical-surgical dysfunctions.		
Describe appropriate laboratory and diagnostic procedures pertinent to specific medical-surgical dysfunction.	Appreciate the value of collaboration and teamwork with other members of the healthcare team.	Demonstrate beginning patient teaching skills.
Describe the medical managements including pharmacological, treatment and surgical interventions in various medical surgical conditions	Value accuracy and safety in providing care to patients.	Administer medications adhering to safety measures and best practices.
Discuss the components of complete and accurate documentation of care.	Value the importance of accurate medical reporting and recording of care	Use appropriate medical terminology in reporting and recording in medical record.

Course Content:

Unit I │ Biophysical and Psychosocial Concepts in Nursing Practice

A. Concept of Homeostasis
B. Stress and Types of Stressors
    1. Stress as Stimulus for Disease;
    2. Psychological Responses to Stress;
    3. Physiologic Response to Stress:
        a) Theory of adaptation;
        b) The brain interpretation of stressful stimuli;
        c) Maladaptive responses to brain:
            (1) Indicators and assessment of stress;
        d) Stress at the cellular level:
            (1) Cellular adaptation;
            (2) Cellular injury;
            (3) Inflammation;
            (4) Cellular healing;
        e) Role of stress in health patterns;
    4. Nursing Management:
        a) Promoting a healthy lifestyle;
        b) Enhancing coping strategies;
        c) Patient Education;

d) Nutrition;
e) Enhancing social support

Unit II │ Care of the Older Adult

A. Overview of Aging
1. Selected Theories of Aging;
2. Age-Related Changes of Aging;
3. Cognitive Aspect of Aging;
4. Pharmacologic Aspects of Aging;
5. Nursing Care of the Older Adult;
6. Geriatric Syndromes

Unit III │ Perioperative Concepts and Nursing Management

A. Preoperative Nursing Management
1. Surgical Classifications;
2. Preadmission Testing;
3. Special Considerations During the Perioperative Period;
4. Informed Consent;
5. Preoperative Assessment;
6. Nutritional and Fluid Status;
7. Psychosocial Factors;
8. Preoperative Nursing Interventions;
9. Patient Teaching

B. Intraoperative Nursing Management
1. The Surgical Team;
2. The Surgical Environment;
3. The Surgical Experience;
4. Potential Intraoperative Complications:
   a) Anesthesia awareness;
   b) Nausea and vomiting;
   c) Anaphylaxis;
   d) Hypoxia and respiratory complications;
   e) Hypothermia;
   f) Malignant hyperthermia;
5. Nursing Process: The Patient During Surgery

C. Postoperative Nursing Management
    1. Care of the Patient in Post-anesthesia Care Unit:
        a) Phases of Post-anesthesia Care;
        b) Admitting the patient to the Post-anesthesia Care Unit;
        c) Nursing management in the Post-anesthesia Care Unit;
        d) Preparing the post-operative patient for direct discharge
D. Care of the Hospitalized Postoperative Patient
    1. Receiving the Patient in the Clinical Unit;
    2. Nursing Management after Surgery;
    3. Nursing Process: The Hospitalized Patient Recovering from Surgery

Unit IV │ Pain Management Concept

A. Fundamental Concepts
    1. Definition of Pain:
        a) Effects of pain;
        b) Types and categories of pain;
    2. Pain Assessment:
        a) Comprehensive pain assessment;
        b) The patient interview;
        c) Pain reassessment;
    3. Pain Management:
        a) Pharmacologic management of pain;
        b) Non-pharmacologic methods of pain management;
        c) Nursing implications of pain management

Unit V │ Fluid and Electrolytes Balance and Disturbance

A. Fundamental Concepts
B. Fluid volume Disturbances
    1. Pathophysiology;
    2. Clinical Manifestations:
        a) Hypovolemia;
        b) Hypervolemia;
    3. Nursing Care
C. Fluid Imbalances and Nursing Care
    1. Sodium;
    2. Potassium;
    3. Calcium;

4. Magnesium;
5. Phosphorous;
6. Chloride

D. Acid-Base Disturbances and Nursing Care
1. Metabolic Acidosis;
2. Metabolic Alkalosis;
3. Respiratory Acidosis;
4. Respiratory Alkalosis;
5. Mixed Acid-Base Disorder

E. Parenteral Fluid Therapy
1. Purpose;
2. Types of Intravenous Solutions:
    a) Isotonic fluids;
    b) Hypotonic fluids;
    c) Hypertonic fluids;
    d) Other intravenous therapies;
3. Nursing Management of the Patient Receiving Intravenous Therapy:
    a) Managing systemic complications;
    b) Managing local complications

Unit VI │ Kidneys and Urinary Function

A. Overview
1. Anatomic and Physiologic Overview;
2. Assessment of the Kidney and Urinary Tract Function:
    a) Health history;
    b) Physical examination;
    c) Diagnostic evaluation:
        (1) Urinalysis and urine culture;
        (2) Renal function test;
        (3) Imaging studies;
        (4) Endoscopic procedures;
        (5) Biopsy;
3. Kidney Disorders: Pathophysiology and Nursing Process:
    a) Fluid-electrolyte imbalance;
    b) Kidney disorders:
        (1) Chronic kidney disease;
        (2) Nephrosclerosis;

(3) Primary glomerular diseases:
i. Acute nephritis syndrome;
ii. Chronic glomerulonephritis;
iii. Nephrotic syndrome;
(4) Polycystic kidney disease;
(5) End stage kidney disease;
c) Renal cancer;
d) Treatment modalities:
(1) Dialysis:
i. Hemodialysis;
ii. Peritoneal dialysis;
(2) Surgical interventions;

4. Urinary Tract Disorders: Pathophysiology and Nursing Process:
a) Infections;
b) Urinary incontinence;
c) Urolithiasis and nephrolithiasis;
d) Urinary tract cancers;
e) Treatment modalities:
(1) Urinary diversions;
(2) Surgical interventions

Unit VII │ Integumentary Function

A. Overview
1. Anatomic And Physiologic Overview;
2. Assessment;
3. Diagnostic Evaluation

B. Management of Patients with Dermatologic Disorders
1. Protecting the Skin;
2. Preventing Secondary Infection;
3. Reversing the Inflammatory Process;
4. Wound Dressing Care for Skin Disorders;
5. Autolytic Debridement;
6. Categories of Dressings

C. Patients with Skin Disorders: Pathophysiology and Nursing Process:
1. Pruritus;
2. Secretory Disorders:
a) Seborrheic Dermatoses;

3. Infectious Dermatoses:
    a) Bacterial skin infection:
        (1) Impetigo;
        (2) Folliculitis, furuncles and carbuncles;
    b) Viral skin infections:
        (1) Herpes simplex;
        (2) Herpes zoster;
    c) Fungal (mycotic) skin infection;
    d) Parasitic skin infestations:
        (1) Pediculosis;
        (2) Scabies;
4. Non-Infectious Inflammatory Dermatoses:
    a) Irritant contact dermatitis;
    b) Psoriasis;
    c) Generalized exfoliative dermatitis;
    d) Blistering diseases;
5. Skin Tumors:
    a) Benign skin tumors;
    b) Malignant skin tumors

Unit VIII │ Musculo-Skeletal Function

A. Overview
    1. Anatomic and Physiologic Overview;
    2. Assessment and Diagnostic Evaluation;
    3. Musculoskeletal Care Modalities & Nursing Care:
        a) Casts;
        b) Splints and braces;
        c) Traction;
        d) External fixator;
        e) Patient undergoing orthopedic surgery
B. Musculoskeletal Disorders: Pathophysiology and Nursing Process
    1. Low Back Pain;
    2. Bursitis and Tendonitis;
    3. Foot Problems:
        a) Callus and corn;
        b) Hallux valgus;
        c) Hammer toe;
        d) Pes cavus and pes planus;

e) Plantar fasciitis;
4. Metabolic Bone Disorders:
    a) Osteoporosis;
    b) Paget's disease;
    c) Osteomyelitis;
5. Septic (Infectious) Arthritis;
6. Bone Tumors

Unit IX │ Hematologic Function

A. Overview
    1. Anatomic and Physiologic Overview;
    2. Assessment:
        a) Health history;
        b) Physical examination;
        c) Diagnostic evaluation:
            (1) Hematologic studies;
            (2) Bone marrow aspiration and biopsy
B. Therapeutic Approaches to Hematologic Disorders
    1. Splenectomy;
    2. Therapeutic Phlebotomy;
    3. Blood Transfusion:
        a) Blood component therapy;
        b) Blood donation;
        c) Pretransfusion assessment;
        d) Patient education;
        e) Potential complications of blood transfusion;
        f) Nursing care;
        g) Reporting and recording
C. Patients with Nonmalignant Hematologic Disorders: Pathophysiology and Nursing Process:
    1. Anemia:
        a) Classification and pathophysiology;
        b) Assessment and diagnostic findings;
    2. Sickle Cell Disease;
    3. Thrombocytopenia;
    4. Disseminated Intravascular Coagulation;
    5. Patients With Hematologic Neoplasms;
    6. Leukemias;

7. Lymphomas (Hodgkin And Non-Hodgkin);
8. Multiple Myeloma

Unit X │ Male Reproductive Function

A. Overview
    1. Anatomic and Physiologic Overview;
    2. Assessment:
        a) Health history;
        b) Physical assessment;
        c) Diagnostic evaluation:
            (1) Prostate-specific antigen (PSA) test;
            (2) Ultrasonography;
            (3) Prostate fluid and tissue analysis;
            (4) Tests for male sexual function

B. Male Genito-Urinary Tract Disorders: Pathophysiology and Nursing Process
    1. Erectile dysfunction;
    2. Infections:
        a) Urinary tract infection;
        b) Prostatitis;
        c) Orchitis;
        d) Phimosis;
    3. Benign and Malignant Tumors:
        a) Benign prostatic hypertrophy and cancer of prostate;
        b) Testicular cancer;
        c) Cancer of the penis;
    4. Treatment Modalities:
        a) Medical interventions;
        b) Prostate surgery;
        c) Circumcision;
        d) Vasectomy

Unit XI │ Digestive and Gastro-Intestinal Function

A. Overview
    1. Anatomic and Physiologic Overview;
    2. Assessment:
        a) Health history;

b) Physical assessment;
c) Diagnostic evaluation:
(1) Laboratory studies;
(2) Stool test, breath test, gastric analysis;
(3) Ultrasonography;
(4) Imaging studies;
(5) Endoscopic procedures;

3. Treatment Modalities:
   a) Gastrointestinal intubation;
   b) Gastrostomy and jejunostomy;
   c) Parenteral nutrition;
   d) Medical and surgical interventions:
      (1) Ostomy;
      (2) Surgical resection;
4. Gastric and Duodenal Disorders: Pathophysiology and Nursing Process
   a) Gastritis;
   b) Peptic ulcer disease;
   c) Gastric tumors and cancer;
5. Intestinal and Rectal Disorders: Pathophysiology and Nursing Process
   a) Constipation;
   b) Diarrhea;
   c) Fecal incontinence;
   d) Irritable bowel syndrome;
6. Malabsorption Syndrome (Celiac Disease);
7. Acute Abdomen:
   a) Peritonitis;
   b) Appendicitis;
   c) Diverticular disease;
   d) Intestinal and large bowel obstruction;
8. Inflammatory Bowel Disease:
   a) Crohn’s disease;
   b) Ulcerative colitis;
9. Anorectal Disorders:
   a) Abscess, fistula and fissures;
   b) Hemorrhoids;
   c) Pilonidal cyst or sinus;
10. Colorectal Neoplasm

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Care planning and concept mapping
- Case studies
- Problem-based learning
- Homework/assignments
- Clinical teaching and coaching
- Log book
- Interdisciplinary Procedure Manual
- Group presentation

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

Reference:

Hinkle J.L. & Cheever, K.H. (2018). *Brunner and Suddarth's Textbook of Medical-Surgical Nursing* (14th ed.), Philadelphia: Wolters Kluwer.

Pediatric Nursing I

Credits: 3

Placement within the Curriculum:

Year 2, Semester 1

Duration:

16 weeks (14 instructional and 2 exams)
42 instructional hours
126 clinical hours

Prerequisites:

Health Assessment; PHC-II; Pharmacology and Dosage Calculation; Ob/Gyn I and Medical Surgical I

Course Description:

This is the first part of a two-part clinical pediatric nursing course. This course is designed to teach the students the role of the pediatric nurse who provides care to children from birth to adolescence. It builds on and assumes knowledge of newborn care, and care of the neonate to age two months. It addresses the well child care, health promotion, and growth and development. Emphasis is placed on evidence-based care with regards to the use of the nursing process and selected nursing theories in the care of children and adolescents.

Course Outcomes:

At the end of this course the student will be able to

- Explore problems relative to pediatrics in developing countries, especially to Liberia.
- Describe the role of the pediatric nurse in the care of the child, family and community.
- Describe the concepts and principles of growth and development of children.
- Apply the nursing process in providing comprehensive nursing care of children while incorporating the principles of the stages of growth and developmental.

- Implement health promotion and prevention strategies appropriate at each age level.

Competencies:

Knowledge	Attitudes/Values	Skills
Define major terms used in pediatrics.	Demonstrate respectful and effective interactions with children and their parents.	Provide care to children and adolescents consistent with the principles of growth and developmental stages.
Describe the stages of growth and development.	Value the importance of using evidence in pediatric nursing care.	Provide care based on evidence, best practices, political, regulatory and economic factors.
Describe the role of the pediatric nurse as care provider, teacher, advocate and counselor.	Value the inherent worth and uniqueness of individuals and populations.	Assesses patient values, preferences, decisional capacity, and expressed needs as part of ongoing assessment, clinical interview, implementation of care plan, and evaluation of care
Describe the role of local, national and international organization in pediatric care in Liberia.	Appreciate the effects of health and social policies on persons from diverse backgrounds	Use quality indicators and core measures to evaluate the effect of changes in the delivery of care.
Critique child care practices commonly followed in Liberia, including developmental expectations for infants, children and adolescents.	Articulate issues at the unit level that impact care delivery.	Apply the nursing process in the care of the pediatric patient.

Interpret deviations from normal in developmental expectations.	Appreciate that legal, political, regulatory and economic factors influence the delivery of patient care	Implement health promotion, disease and injury prevention strategies appropriate at each age level: infancy, young childhood and adolescence.
Describe safety and hygienic measures to prevent infection through handwashing, food safety and clean water.	Value the need to remain informed of how legal, political, regulatory, and economic factors impact professional nursing practice	Use play as a nursing intervention.
Describe strategies for prevention, recognition and care of most common illnesses for age group	Appreciate that care and services are delivered in a variety of settings along a continuum of care that can be accessed at any point.	Teach best nutrition practices for children to patient, family and community.
Explain the prevention and early management of most common injuries for age group	Advocate for health promotion for children and their families at the local and state level.	Demonstrate best feeding practices for children.
List the names, types, dosage, timing and methods of administration of vaccinations on the immunization schedule		Teach safety measures appropriate for developmental stages.
Explain contraindications for administering vaccine in under-five clinics		Administer medications to children using safety and best practices.
Describe the side effects of each vaccination, its timing and management		Provide nutritional counseling to mothers of infants and children related to breastfeeding, weaning foods, transition to family foods and emphasis on fresh, unprocessed, low fat foods.

Discuss proper storage and disposal of vaccines and equipment.		Encourage exercise as a family activity.
		Provide anticipatory guidance regarding prevention and early management of diarrhea and dehydration.
		Provide developmental surveillance and health screening.
		Demonstrate the correct procedure for the administration of immunizations safely and effectively.

Course Content:

Unit I │ Introduction to Pediatric Nursing

A. Definitions
    1. Pediatrics;
    2. Pediatric nursing;
    3. Family-Centered Care;
    4. Traumatic Care
B. Historical Development of Pediatric Nursing
    1. Theories and Theorists;
    2. Role of Family in Child and Adolescent Care;
    3. Special Considerations in Pediatric Nursing Care;
    4. Ethical and Cultural Issues in Pediatric Care;
    5. National Health Programs Related to Child Health;
    6. Nursing Process in the Care of Children
C. The Role of the Pediatric Nurse
    1. In the Community and Health Facility;
    2. Direct Care Provider;
    3. Health Educator;
    4. Teacher of Child, Family and Community Caregiver;
    5. Advocate;

6. Counselor

D. Local and International Organizations Responsible for Child Health in Liberia
    1. UNICEF;
    2. Save the Children-UK;
    3. Antoinette Tubman Cheshire Home;
    4. SOS Village;
    5. Nursery Schools;
    6. Orphanages;
    7. Institutional Care;
    8. Day Care;
    9. Well-Baby Clinic;
    10. Nursery Schools;
    11. Health Facilities;
    12. Facilities for Children with Special Health Care Needs;
    13. Others
E. Cultural Norms and Influences
    1. Bush/Traditional Schools;
    2. Child Rearing Practices;
    3. Urban Migration;
    4. Sexual Promiscuity
F. Family Health Services
    1. Mental Health and Social Work;
    2. UNICEF;
    3. WHO;
    4. Bilateral AIDS Organization;
    5. Cheshire Homes;
    6. Sos Village

Unit II │ Overview, Growth and Development

A. Concepts and Theories of Growth and Development
    1. Developmental Milestones;
    2. Developmental Tasks and Special Needs;
    3. Growth Monitoring;
    4. Role of Play in Growth and Development Of Children
B. Overview of the Types of Growth and Development
    1. Physical;
    2. Emotional/Mental;
    3. Psycho-Social;

4. Cognitive;
5. Sexual

C. Patterns of Growth and Development
    1. Cephalo-Caudal;
    2. Proximal-Distal;
    3. Gross Motor to Fine Motor;
    4. The Growth Sequence
D. Stages of Growth and Development
    1. Infant;
    2. Toddler;
    3. Pre-schooler;
    4. School Age Children;
    5. Adolescent
E. Factors Influencing Growth and Development
    1. Genetic;
    2. Nutritional;
    3. Endocrine;
    4. Environmental;
    5. Disease conditions

Unit III │ Pediatric Assessment

A. Overview of Child Assessment
B. Techniques and Guidelines for Taking and Recording a Pediatric Medical History
C. Physical Examination of Children
    1. Techniques Appropriate for Each Age;
    2. Privacy And Autonomy for Each Age

D. Assessment of Developmental Milestones
    1. Denver Developmental Screening Test (DDST);
    2. Others
E. Nutritional Assessment
F. Growth Monitoring and Recording Using Road to Health Charts
    1. Weight;
    2. Height;
    3. Head Circumference;
    4. Arm Circumference;
    5. Triceps;
    6. Skin folds

G. Instruction of Families Regarding the Road to Health Charts

Unit IV │ Pediatric Interventions

A. Building Trust with Patient and Family, Trust in Nurse and Trust in Health Care System
B. Safety Measures
    1. Environmental Factors;
    2. Use of Restraints;
    3. Transporting Children;
    4. Limit Setting;
    5. Positions for Procedures
C. Procedures for Vital Signs
    1. Temperature;
    2. Blood Pressure;
    3. Pulse and Respiration;
    4. Precautions and Safety Measures to Be Observed;
    5. Recording;
    6. Interpretation of Findings:
        a) Normal;
        b) Abnormal
D. Analysis and Interpretation of Laboratory Findings
E. Drug Use in Pediatric Nursing
    1. General Principles;
    2. Common Measurements
F. Rules for Calculating Dosage
    1. By Weight;
    2. By Age
        a) Clark's Formula;
        b) Young's Formula
G. Methods of Administration of Medications
    1. Oral Medications;
    2. Rectal;
    3. Nose, Ear and Eye Drops;
    4. Injections: S.C., I.M., I.V.
H. Safe and Effective Drug Administration
    1. Checking Dosages;
    2. Identification of Patient;
    3. Approach to Patients and Parents;
    4. Recording of Drug Administration

I. Special Feeding Techniques and Administration
    1. Gavages;
    2. Gastrostomy
J. Play as a Nursing Intervention

Unit V │The Well Child, Under Five

A. Parameters for Measuring Growth
    1. Head Circumference;
    2. Weight and Height;
    3. Arm Circumference;
    4. Dentition;
    5. Locomotion
B. Psychosocial Parameters
    1. Language;
    2. Interactive Social Skills;
    3. Sensory Motor Development;
    4. Emotional Support;
    5. Effect of Separation from Significant Caretaker;
    6. Development of Different Modes of Play;
    7. Milestones;
    8. Development Tasks;
    9. Discipline;
    10. Normal Variations in Behaviors;
    11. Eating Habits
C. Feeding
    1. Cultural Feeding Practices;
    2. Feeding methods:
        a) Breastfeeding;
        b) Spoon feeding;
        c) Cup feeding;
        d) Bottle feeding;
    3. Supplementary Foods;
    4. Emphasizing Local Foods;
    5. Weaning Practices and Methods;
    6. Simple Soft Foods;
    7. Cooking to Maintain Nutritional Values of Food;
    8. Hygienic Cooking Practices;
    9. Micronutrients

D. Factors Influencing Breastfeeding Practices
    1. Benefits of Breastfeeding;
    2. Emotional Support for Breastfeeding Mothers;
    3. Establishing And Maintaining Breastfeeding for 2 Years;
    4. Handling Breastfeeding Problems;
    5. Guidelines for Starting Weaning Food
E. Safety for the Under-Five Child
    1. Safe Sleep;
    2. Malaria Protection;
    3. Home Safety;
    4. Transportation Safety;
    5. Water Safety;
    6. Safe Storage of Toxic Substances and Medications;
    7. Prevention of Unintentional Injury;
    8. Prevention of Intentional Injury
        a) Promoting the infant and child's mental health;
    9. Safe Parenting Practices;
    10. Effective Discipline at Each Age Group;
    11. Food Safety;
    12. Clean Water
F. When to Take the Under-Five Child to the Doctor/Health Care Provider: Recognizing Serious Illness or Injury
G. Home Care of Simple Mild Illness and Injury
    1. Fever Management:
        a) Recognition of serious fever;
        b) Management of simple fever;
        c) Oral rehydration for diarrhea and vomiting

Unit VI │The Well Child, Over Five

A. Parameters for Measuring Growth and Development
    1. Weight and Height;
    2. Dentition;
    3. Sexual Maturation
B. Psychosocial Parameters
    1. Language;
    2. Interactive Social Skills;
    3. Emotional Support;
    4. Development of Different Modes of Play;
    5. Milestones;

6. Development Tasks;
7. Discipline;
8. Normal Variations in Behaviors;
9. Eating Habits;
10. Self-Management of Health;
11. Health Care Decision-Making;
12. Fitness and Obesity Prevention;
13. Prevention of Smoking;
14. Prevention of Drug Misuse

C. Nutrition:
   1. Cultural Foods and Eating Practices;
   2. Emphasizing Local Foods;
   3. Weaning Practices and Methods;
   4. Cooking to Maintain Nutritional Values of Food;
   5. Hygienic Cooking Practices;
   6. Micro Nutrients

D. Safety for the Older Child
   1. Home Safety;
   2. Transportation and Pedestrian Safety;
   3. Water Safety;
   4. Safe Storage of Toxic Substances and Medications;
   5. Prevention of Unintentional Injury;
   6. Prevention of Intentional Injury
      a) Promoting the older child and adolescent's mental health;
   7. Parenting Practices That Promote Safe Independence at Each Age;
   8. Effective Discipline at Each Age Group;
   9. Food Safety;
   10. Clean Water

E. When to Take the Over-Five Child to the Doctor/Health Care Provider: Recognizing Serious Illness or Injury

F. Home Care of Simple Mild Illness and Injury
   1. Fever Management:
      a) Recognition of serious fever;
      b) Management of simple fever;
      c) Oral rehydration for diarrhea and vomiting;
   2. Traumatic Injury:
      a) First aid;
      b) What to watch for that requires health care intervention

Unit VII │The School Child 6 Years–12 Years

A. Parameters for Monitoring Growth
    1. Weight;
    2. Height;
    3. Dentition;
    4. Locomotion;
    5. Sexual Development
B. Cognitive, Emotional and Social Development
    1. Concrete Operational Stage;
    2. Thinking and Reasoning Skills;
    3. Language;
    4. Social Behavior;
    5. Concepts of Time;
    6. Emotional Development;
    7. Independency;
    8. Industry;
    9. Bereavement;
    10. Play;
    11. Behavioral Characteristics
C. Nutritional Needs
    1. Nutritional Assessment;
    2. Well Balanced Diets for the Growing Child;
    3. Eating Habits;
    4. Nutritional Counseling of Parents
D. Counseling
    1. Health Education Talks and Messages;
    2. Visual Aids;
    3. Teach Back

Unit VIII │The Teenager and Adolescent

A. Physical Changes in Puberty Intellectual and Social Development
    1. Rational Thinking;
    2. Acceptance by Peer Group;
    3. Identify;
    4. Conflicts;
    5. Moral Development:
        a) Idealism

B. Privacy
    1. Frequent Communication;
    2. Channels Between Parents/Guardians;
    3. Balance Between Freedom and Limits;
    4. Earning vs. Spending;
    5. Constructive Criticism;
    6. Understanding and Trust
C. Problems Related to Pubescence
    1. Changes in Self-Image and Identify;
    2. Early or Delayed Maturation;
    3. Medical Problems;
    4. Skin;
    5. Pregnancies/Abortions;
    6. Personal Changes;
    7. Venereal Diseases;
    8. The Environment;
    9. Social Norms and Cultural Values;
    10. Education to Prevent Problems
D. Common Accidents
    1. Vehicles;
    2. Injuries;
    3. Fractures;
    4. Drowning;
    5. Overdose of Drug and Alcohol;
    6. Poisonous Bites and Sittings;
    7. Preventive Measure for the Above Accidents:
        a) First aid
E. Well-Balanced Diets:
    1. Dietary Problems;
    2. Anorexia;
    3. Obesity
F. Premenstrual Syndrome
    1. Rape;
    2. Masturbation;
    3. Suicidal Tendencies
G. Adolescent-Friendly Health Care Environment
    1. What it is;
    2. Setting Up Health Facilities to Be Adolescent Friendly;

3. Adolescent Counseling;
4. Health Education

Unit IX │ Immunization, Screening, and Health Promotion

A. Definition of Immunization
B. EPI Targeted Diseases
    1. Diphtheria;
    2. Pertussis;
    3. Tetanus;
    4. Hepatitis B;
    5. Hepatitis A;
    6. Haemophilus Influenza type B;
    7. Poliomyelitis (suspected);
    8. Tuberculosis;
    9. Measles;
    10. Yellow Fever
C. Types of Vaccines
    1. BCG;
    2. OPV;
    3. Measles;
    4. Yellow Fever;
    5. DPT-Hep-B-Hib vaccines;
    6. Pentavalent;
    7. Rota;
    8. Pneumo
D. Purpose of Immunization
    1. Immunization Schedules:
        a) Age;
        b) Type;
        c) Mode;
        d) Dosage;
        e) Time intervals
E. Procedures for Administration of Vaccine
    1. Family Teaching Related to Immunizations;
    2. Mode of Administration:
        a) Intramuscular;
        b) Subcutaneous;
        c) Intradermal;
        d) Oral administration;

3. Skin Preparation (clean water);
4. Administration and Dosage;
5. Hand Washing

F. Contraindication for Administering Vaccine
   1. Adverse Events Following Previous Vaccines;
   2. Immunization (AEFI)

G. Side Effects of Vaccine:
   1. Side Effects/Complication;
   2. Management;
   3. Adverse Effects Following Immunization (AEFI)

H. Administration of Vaccine Program: Storage, Disposal, Records and Evaluation
   1. Cold Chain;
   2. Ordering of Vaccine;
   3. Distribution of Vaccines;
   4. Record Keeping;
   5. Expiration Date;
   6. Disposal of Equipment;
   7. Supervision, Monitoring and Evaluation;
   8. Ordering of Vaccine;
   9. VVM

I. Planning Immunization and Health Promotion Sessions
   1. Routine;
   2. Supplemental Immunization Activities;
   3. De-worming;
   4. Vitamin-A Supplements;
   5. Screening for Vitamin and Mineral Deficiencies;
   6. Vaccinations;
   7. Developmental Surveillance and Anticipatory Guidance

Clinical Component:

This course will help the learner enhance the skills and knowledge drawn from Fundamentals of Nursing clinical experiences while working with sick/well children and their families in the hospital and community setting.

Clinical Objectives:

- Develop individualized nursing care plans
- Deliver appropriate nursing care to the pediatric client based on diagnosis age and developmental stage
- Work effectively with other members of the health team to improve care of children and their families
- Teach the client and family about available support that can help with difficulties concerning child diagnosis and treatment
- Incorporate relevant cultural norms and practices to communicate with clients, families and team
- Demonstrate good documentation of patient care

Clinical Skills:

- Admitting a child
- Bathing a child
- Calculating pediatric drug dosages and IV fluids
- Administering oxygen
- Inserting naso-gastric tube
- Inserting urine catheter
- Preparing a child for surgery
- Making beds for pediatric clients
- Preparing care plans for pediatric clients

Clinical Placement:

- Pediatric Units
- Outpatient Departments
- Clinics
- Health centers
- Schools (primary and secondary)

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions.
- Complete all assignments and examinations on due dates.

Teaching/Learning Strategies:

- Lectures/discussions
- Small group work
- Case study
- Self-directed learning
- Simulations

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/charts
- Skeleton

Assessment:

- Written exams
- Clinical logs
- Case presentations
- Reflective diary
- OSCE
- Checklists
- Care plans

Assessment Criteria—Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Hockenberry, M. J. & Wilson, D. (2018). Wong's Essentials of Pediatric ursing Care of Infants and Children (11th ed.). St. Louis: MO, Elsevier Mosby.

U.S. National Library of Medicine. Medline Plus Normal growth and development. Retrieved from https://medlineplus.gov/ency/article/002456.htm.23

World Health Organization. (23 Oct. 2018). Healthy diet. Retrieved from https://www.who.int/news-room/fact-sheets/detail/healthy-diet.

World Health Organization. (2018). Global action plan on physical activity 2018-2030: More active people for a healthier world. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf?ua=1.

Ethical and Professional Adjustment

Credits: 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
28 instructional hours

Placement within the Curriculum:

Year 2, Semester 1

Prerequisites:

Primary Health Care & Community Health Nursing: Serving Populations, Pharmacology & Drug Calculations, Fundamentals of Nursing II, Anatomy and Physiology II, and Health Assessment.

Course Description:

This course provides an introduction to the professional, legal, and ethical frameworks used in decision-making in nursing. It provides opportunities for discussion of concepts on moral and ethical responsibilities related to nurses, patients, and institutions and provides a foundation for nursing management. It provides students with skills to work through ethical dilemmas and support clients in making responsible choices about their social well-being. Principles of professional practice and professional regulation in nursing will be highlighted as a foundation upon which practice will be built.

Course Outcomes:

By the end of this course, the student will be able to:

- Discuss the nursing code of ethics
- Apply ethical theories and their principles when addressing ethical issues in nursing practice
- Demonstrate professional rights and obligations in the delivery of nursing care
- Examine factors that impact on self-regulation and professional practice

Competencies:

Knowledge	Attitudes/Behaviors	Skills
Demonstrates accountability for own actions	Recognizes value of accountability for own actions	Organizes plan of care with legal, ethical, and regulatory principles as framework
Describes legal and regulatory factors that apply to nursing	Values and upholds legal and regulatory principles	Participates as member of professional organization
Describes the roles of professional organizations within nursing practice	Values acting in accordance with code of ethics and accepted standards of practice	Serves as patient advocate
Relates ethical principles as they apply to clinical decision-making	Chooses to advocate for patients' rights	

Course Content:

Unit I │ Introduction to Ethics

Unit II │ Origin of Ethics

Unit III │ Ethical Principles and Duties

Unit IV│ Ethical theories

Unit V │ Ethical Dilemmas

Unit VI │ Approaches to Ethical Dilemmas

Unit VII │ Rights and Health Care

Unit VIII │ Use of Ethical Decision Making Models

Unit IX │ Nursing and Ethics

A. What is Nursing Ethics
B. Principles of Nursing Ethics

Unit X │ Implications of Law on Nursing Practice

Unit XI │ Code of Ethics for Nurses

Unit XII │ Nursing Practice Act of Liberia

Unit XIII │ Philosophy

A. Principles
B. Roles and Goals of Professional Organizations and Ethics
C. Organizations and Ethics

Unit XIV │ Traditional Practice Associations

Unit XV │ Professional adjustment

Teaching/Learning Strategies:

- Lecture
- Role play
- Case studies
- Demonstrations
- Coaching
- Homework assignments

Course Expectations:

- Regularly attend classroom sessions
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class
- Complete all assignments and examinations on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Bah, H.T. and Sey-Sawo, J. (2018). Teaching and practicing nursing code of ethics and values in the Gambia. *International Journal of Africa Nursing Sciences,9,* 68-72. https://doi.org/10.1016/j.ijans.2018.08.005

Butts, J. and Rich, K. (2016). *Nursing ethics, 4th ed*. Burlington, MA: Jones & Bartlett Learning.

Fowler, M. (2015). *Guide to the code of ethics for nurses: With interpretive statements: Development interpretation, and application, 2nd* ed. Silver Spring, MD: American Nurses Association.

Teaching in Nursing

Credits: 3

Placement within the Curriculum:

Year 2, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours
126 teaching practicum hours

Prerequisites:

Nutrition, Obstetric Maternity Nursing, Medical-Surgical Nursing I, pediatric Nursing I, and Ethical and Professional Adjustment.

Course Description:

This course prepares the student to be a nurse educator. The course provides a foundation in teaching and learning that includes the learning theories, principles of adult education, effective teaching strategies, classroom management techniques and evaluation. The student will learn how to assess learning needs assessment, write course outcomes, do lesson planning, and conduct formative and summative evaluation.
The course includes a 126-hour practicum to allow the student to apply the theories, principles, skills and best practices in teaching nursing in didactic, simulation and classroom settings. The students will have a precepted experiential learning to gain competence in teaching.

Course Outcomes:

At the end of this course the student will be able to

- Apply learning theories in teaching nursing and community health education
- Develop a lesson plan consistent with sound, effective teaching practices.
- Demonstrate effective teaching strategies that motivate and engage students.
- Apply the principles of clinical teaching.

- Develop test questions and clinical performance evaluation tools aligned with course outcomes/objectives.
- Develop a strategic plan to effect and manage change to improve patient care.
- Apply the principles of effective health education to individuals, family and community.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe the learning theories and their application in teaching.	Appreciate the need for theoretical concepts in implementing education practices.	Apply learning theories in teaching.
Describe the process of developing a lesson plan.	Value the need for structured lesson planning to meet learning outcomes/objectives	Develop a lesson plan consistent with sound, effective teaching practices.
Articulate the processes that lead to effective facilitation of learning.	Appreciate the role of the nurse educator in facilitating learning	Demonstrate effective teaching strategies that motivate and engage students.
Describe the principles and mechanics of effective clinical teaching in nursing.	Value the need for effective clinical teaching in nursing.	Demonstrate effective clinical teaching.
Describe the evaluation processes in assessing learning.	Appreciate the importance of effective evaluation in learning.	Develop test questions consistent with effective evaluation of Bloom's taxonomy.
		Evaluate clinical performance of students.
Discuss the role of the nurse educator in effecting and managing change.	Value the nurse educator role in effecting and managing change.	Develop a strategic plan to implement change to improve patient care.
Explain how the nurse educator leads in delivering effective health education.	Value how health education lead to positive changes to individual, family, community and nation health.	Apply the principles of effective health teaching to individual, family or community.

Course Content:

Unit I │ Introduction to Nursing Education

A. Selected Learning Theories
    1. Behaviorism;
    2. Constructivism;
    3. Experiential Learning;
    4. Adult Learning Theories
B. Learning Styles
    1. Visual;
    2. Auditory;
    3. Kinesthetic
C. Bloom's Taxonomy of Learning
    1. Knowledge;
    2. Comprehension;
    3. Application;
    4. Analysis;
    5. Synthesis;
    6. Evaluation

Unit II │ Competencies in Teaching

A. Facilitate Learning
    1. Assessment of Learning Needs – The Learning Gap:
        a) Identify knowledge, skills and attitudes;
    2. Developing Learning Outcomes and Objectives:
        a) Writing course objectives and outcomes;
        b) Lesson planning;
        c) Developing a course syllabus;
        d) Develop a course schedule;
    3. Identifying Content in Alignment with Outcomes/Objectives:
        a) breaking down difficult concepts;
        b) leveling complex content;
    4. Selecting Instructional Strategies:
        a) Motivating students
            (1) Gaming;
            (2) Use of incentives/rewards/grades;

b) Participatory learning/Student
(1) Interactive didactive lecture/presentation;
(2) Discussion;
(3) Study trips;
(4) Panel discussion;
(5) Group work;
(6) Facilitate a case study;
c) Deep learning
(1) Brain storming;
(2) Reflection/journaling;
(3) Writing exercise;
(4) Individual/group reports;
d) Drilling knowledge
(1) Gaming;
(2) Q&A;
e) Use of technology to enhance learning
(1) Videos;
(2) Internet;
(3) Slides;
(4) Simulations;
(5) High fidelity manikins;
f) Teaching psychomotor skills
(1) Simulation;
(2) Skills demonstration;
(3) Create & facilitate a role play;
g) Clinical Teaching

B. Assessment and Evaluation Strategies
1. Formative:
a) Classroom assessment techniques;
b) Skills development;
2. Summative:
a) Quizzes and exams;
b) Assignments;
c) Objective structured clinical examination (OSCE);
3. Clinical Evaluation:
a) Clinical Performance Assessment;
b) Giving feedback;
4. Test Construction:
a) Writing multiple choice items;

b) Writing other types of test:
(1) True/False;
(2) Matching test;
(3) Filling the blanks;
(4) Essay;
(5) Short answer question;

C. Clinical Teaching
1. Role of Clinical Teacher:
a) Information provider;
b) Experience planner and resource;
c) Role model;
d) Facilitator;
2. Theories of Clinical Teaching:
a) Theories of adult learning;
b) Competency-based learning;
c) Experiential Learning;
d) Bandura's Social Cognitive learning:
(1) Sources of self-efficacy:
(a) Mastery experience;
(b) Observation of others;
(c) Verbal persuasion;
(d) Physiologic/emotional components;
3. Stages of Clinical Learning:
a) Unconsciously incompetent;
b) Consciously incompetent;
c) Consciously competent;
d) Unconsciously competent;
4. Clinical Teaching Modalities:
a) Direct instruction;
b) Modeling;
c) Coaching;
d) Facilitating;
e) Clinical preceptorships;
f) Skill demonstration;
5. Challenges of Clinical Teaching:
a) Time constraints;
b) Space;
c) Environmental factors;
d) Finding a balance between learning and patient safety;

e) Challenges in patient care;
f) Student factors (lack of preparation, anxiety, etc.);

6. Effective Teaching:
    a) Assessment of learning gap and student capabilities;
    b) Provide orientation to the clinical unit/ward;
    c) Effective communication with staff and patients/families;
    d) Appropriate assignment at student level;
    e) Adequate preparation of basic skills before clinical;
    f) Effective briefing and debriefing;
    g) Act as a role model;
    h) Timely feedback;
    i) Timely intervention;
    j) Encourage student self-reflection;
    k) Identify teaching moments and use them effectively

D. The Nurse Educator as Change Agent and Leader:
    1. Managing Change;
    2. Preparing for Change;
    3. Lewin's Change Theory:
        a) Unfreeze (ready to change);
        b) Change (Implementation);
        c) Freeze (making it stick);
    4. Kotter Process of Change:
        a) Create a sense of urgency;
        b) Build a guiding coalition;
        c) Form a strategic vision;
        d) Enlist a volunteer early adopters;
        e) Enable action by removing barriers;
        f) Generate short-term wins;
        g) Sustain acceleration;
        h) Institute change

Unit III │ Health Education/SBCC & IEC

A. What is Health Education – The WHO Concept
B. The Issue of Health Literacy
C. Issue of Non-Adherence
D. Importance of Health Education
    1. Improves Health Status of Individuals, Families and Communities and Nation;
    2. Enhances of Quality of Life for All People;

3. Reduces Premature Deaths;
4. Focus on Prevention and Health Maintenance;
5. Reduces Health Care Cost

E. Where Health Education is Employed
1. Schools;
2. College/University Campus;
3. Companies;
4. Health Care Settings: Hospitals, Clinics, Health Centers;
5. Churches, Town Halls;
6. Community Organizations and Government Agencies;
7. Mass Media

F. Health Education Strategies
1. Participation of the Target Population;
2. Completion of Community Needs Assessment to Identify Community Capacity, Resources. Priorities, and Needs;
3. Planned Learning Activities;
4. Implementation of Programs with Integrated, Well-Planned Curricula and Materials That Take Place in a Setting Convenient for Participants;
5. Presentation of Information with Audiovisual and Computer-Based Programs;
6. Ensuring Proficiency of Program Staff, Through Training, to Maintain Fidelity to the Program Model

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Small group discussion
- Seminars
- Classroom presentation
- Teaching demonstration
- Practice teaching (teaching practicum)

Course Expectations:

- Regular classroom session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Practice Teaching/Teaching Demonstration
- Skills lab

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Quizzes 10%
- Assignments
  - Lesson Plan 10%
  - Syllabus 15%
- Teaching Demonstration
  - Lecture/discussion 20%
  - Simulation or Teach a Procedure 20%
- Final Exam 20%

References:

JHPIEGO. (2012). *Effective Teaching Skills: A Blended Learning Approach*. Baltimore: MD, JHPIEGO.

WHO, JHPIEGO. (2005). *Effective Teaching: A Guide for Educating Healthcare Providers Reference Manual.* Geneva: Switzerland, JHPIEGO.

Obstetrics Maternity Nursing II

Credits: 4

Placement within the Curriculum:

Year 2, Semester 2

Duration:

16 weeks (14 instructional and 2 exams)
42 instructional hours
126 clinical hours

Prerequisites:

Nutrition, Obstetric Maternity Nursing, Medical-Surgical Nursing I, pediatric Nursing I, and Ethical and Professional Adjustment.

Course Description:

This is the second part of a two-part clinical obstetrical maternity nursing course. This course continue to address themes related to the principles of safe motherhood while focusing on the clinical care of the newborn/neonates. Emphasis is placed on disorders of the reproductive system.

Course Outcomes:

At the end of this course the student will be able to:

- Explain the process of labor and delivery.
- Integrate knowledge of OB I in managing labor and delivery.
- Describe the disorders of the reproductive system.
- Apply knowledge of anatomical and physiological principles to the care of pregnant women during labor, delivery and the postpartum.
- Apply principles of health assessment to the care of women during labor, delivery and the immediate postpartum period and the care of the newborn.
- Apply principles of communication, health education and counseling to the care of women and families during labor.
- Manage patients in labor, during the delivery and postpartum periods.

- Manage the care of the newborn.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe intra-partum factors affecting maternal and newborn mortality and morbidity.	Act consistently in accordance with standards of practice	Promote the health of the mother and the fetus through optimal nutrition and hydration throughout labor.
Describe the immediate essential care of a newborn.	Maintain/update knowledge and skills, in order to remain current in practice	Manage a women in normal labor using the partograph.
Describe the immediate essential care of a newborn.	Act consistently in accordance with standards of practice	Conduct a normal vaginal delivery.
Discuss growth and development related to sexuality, sexual development and sexual activity	Maintain/update knowledge and skills, in order to remain current in practice	Provide initial management of women experiencing labor and delivery complications
Describe the female and male anatomy and physiology related to conception and reproduction	Increase awareness of the importance of cultural norms and practice surrounding sexuality, sexual practices, marriage and childbearing.	Refer women experiencing labor and delivery complications
Explain the cultural norms and practices surrounding sexuality, sexual practices, marriage and childbearing	Increase awareness of the importance of continuous communication and effective health education and counseling to the care of women and families during pregnancy.	Manage common GYN disorders
Discuss the principles of screening methods for cervical cancer, (e.g., visual inspection with acetic acid [VIA], Pap test, and colposcopy	Value the importance of early recognition of prenatal complications.	Provide essential newborn care to ensure normal respiration, thermal control, feeding and prevention of infection, including cord care using best standards of practice.

Describe the importance of promoting optimal nutrition throughout pregnancy to support the well-being of the mother and the fetus.	Appreciate the role of good nutrition throughout pregnancy for the mother and the baby.	Provide care for premature (born too soon) babies including Kangaroo Mother Care (KMC).
Describe the importance communication, health education and counseling to the care of women and families during pregnancy	Increase awareness of the importance of continuous communication and effective health education and counseling to the care of women and families during pregnancy.	Demonstrate ability to take a comprehensive health and obstetric, gynecologic and reproductive health history.
Describe the signs and symptoms of prenatal complications.	Value the importance of early recognition of prenatal complications.	Engage the woman and her family in preconception counseling, based on the individual situation, needs and interests
		Performs a physical examination, including clinical breast examination, focused on the presenting condition of the woman
		Performs a physical examination, including clinical breast examination, focused on the presenting condition of the woman

Course Content:

Unit I │ Application of Reproductive Anatomy and Physiology to Labor and Delivery

A. Related Terminologies
B. Anatomy of the Pelvis
C. Fetal Anatomy and Physiology
D. Stages of Labor
E. Signs and Symptoms of Labor
F. Physiologic Changes in Labor
    1. Physiology of Uterine Contractions

2. Dilation, Effacement and Descent
3. Mechanisms of Birth

Unit II │ Maternity Care during the First Stage of Labor

A. Diagnosis of Labor – True and False Labor
B. Screening for Maternal and Newborn Risk Factors
    1. HIV, TB, Malaria;
    2. Small for Gestational Age (SGA);
    3. Macrosomia;
    4. Prematurity
C. Management of Normal Labor
    1. Use of the Partograph;
    2. Management of the Latent Phase of Labor;
    3. Management of the Active Phase of Labor;
    4. Monitoring Maternal and Fetal Well-Being During Labor:
        a) Supporting physiologic labor:
            (1) Nutritional needs;
            (2) Hydration;
            (3) Comfort measures/pain management;
            (4) Anxiety
D. Complications of Labor
    1. Premature Labor/Premature Rupture of Membrane (PROM):
        a) Corticosteroids;
        b) Dystocia;
        c) Mal-presentation;
        d) Fetal distress;
        e) Infection;
        f) Hemorrhage;
        g) Retained placenta
E. Documentation of Care
F. Collaboration with Other Health Professionals
G. Counseling and Education of Family

Unit III │ Conducting a Clean and Safe Delivery

A. Managing the Second Stage of Labor
    1. Maternal Positioning;
    2. Determining Fetal Position;
    3. Monitoring Descent;

4. Delivery Equipment and Supplies;
5. Delivery Hand Maneuvers;
6. Protecting the Perineum;
7. Episiotomy/Laceration- Procedures and Techniques for Performing and Repairing an Episiotomy or Laceration;
8. Cord Clamping;
9. Management of the Third Stage of Labor:
    a) Active Management of the Third Stage of Labor (AMTSL):
        (1) Controlled cord traction;
        (2) Uterotonics (oxytocin and misoprostol):
            i. Why uterotonics;
            ii. Storage of medication;
            iii. When and who to administer medication;
            iv. Side effects and management

Unit IV │ Maternity Care in the Immediate Postpartum Period

A. Managing/Preventing Postpartum Hemorrhage with AMTSL and Uterotonics (Misoprostol And Oxytocin)
B. Management of the Mother and Newborn:
    1. Perineal/Vaginal Inspection;
    2. Check Fundus, Bladder, Bleeding, Pain;
    3. Check Vital Signs
C. Assessment of the Mother
D. Assessment of the Newborn
E. APGAR Score
F. Essential Newborn Care:
    1. Prevention of Infection - Eye Ointment and Chlorhexidine for Cord Care
G. Newborn Resuscitation - Helping Baby Breathe (HBB)
H. Promoting Maternal/Newborn Bonding
I. Initiation of Breastfeeding
J. Education and Counseling of Mother and Family:
    1. Danger Signs;
    2. Care of the Newborn;
    3. Family Planning;
    4. Nutrition - ENA

Unit V │ Complications/Problems to Watch for during Labor and Delivery (Intra- Partum Complications)

A. Abnormal Presentations:
   1. Transverse Lie:
      a) Definition;
      b) General considerations;
      c) Etiology;
      d) Physical examination;
      e) Diagnosis;
      f) Management;
      g) Complications;
   2. Prolapsed Arm – Usually with Transverse Lie – See Above-Transfer Immediately;
   3. Breech:
      a) Definition;
      b) Etiology;
      c) Classification/types;
      d) Diagnosis;
      e) Risk factors;
      f) Management;
   4. Face Presentation:
      a) Definition;
      b) Examination;
      c) Diagnosis;
      d) Management;
   5. Persistent Occiput Posterior:
      a) Definition – 15–30% may start as occiput posterior, but most rotate to anterior, leaving 5–6% as persistent;
      b) Symptoms – usually more back pain with contractions;
      c) Course – usually longer course of labor;
      d) Diagnosis;
      e) Management;
   6. Prolapsed Cord:
      a) Definition;
      b) Etiology;
      c) Clinical features;
      d) General considerations;
      e) Management;

7. Cephalopelvic Disproportion (CPD) – Causes Dystocia:
    a) Definition;
    b) Etiology;
    c) Clinical features;
    d) Cephalopelvimetry;
    e) Diagnosis;
    f) Effects and complications of CPD;
    g) Management;
8. Dystocia (mechanical/prolonged obstructed labor):
    a) Definition;
    b) Etiology;
    c) Clinical features;
    d) Examination and assessment;
    e) Management;
9. Fetal Distress:
    a) Definition;
    b) Etiology;
    c) Clinical features;
    d) Assessment;
    e) Monitoring;
    f) Management;
10. Maternal Distress:
    a) Definition;
    b) Etiology;
    c) Clinical features;
    d) Assessment;
    e) Monitoring;
    f) Management;
11. Ruptured Uterus:
    a) Definition;
    b) Etiology;
    c) Clinical presentation;
    d) Diagnosis;
    e) Management;
12. Significant Bleeding During Labor (Not Just Bloody Show) - Under Antepartum:
    a) Suspect placenta previa, abruptio placentae, or uterine rupture - descriptions above;
    b) Choosing the correct diagnosis;

c) Management postpartum complications/after delivery of infant

B. Retained Placenta (entire placenta)
C. Postpartum Hemorrhage
    1. Causes:
        a) Uterine atony – most frequent;
        b) Cervical or vaginal tear;
        c) Retained placental fragment;
    2. Management:
        a) Uterotonic (oxytocin and misoprostol):
            (1) How to use;
            (2) When to use;
            (3) Storage;
            (4) Contraindications;
            (5) Management of side effects;
    3. Puerperal Sepsis:
        a) Symptoms;
        b) Diagnosis;
        c) Management
    4. Postpartum Depression:
        a) Symptoms;
        b) Screening and diagnosis (using the Edinburgh);
        c) Management
D. Newborn Infant:
    1. Essential Care of Newborn – Including Breastfeeding;
    2. Resuscitation:
        a) Helping Babies Breathe (HBB);
    3. APGAR Score;
    4. Danger Signs in Newborns;
    5. Breastfeeding;
    6. Prevention of Inflection:
        a) Chlorhexidine for cord care;
    7. Prematurity Care:
        a) Kangaroo Mother Care

Unit VI │ Nursing Process Applied to the Care to Women with Acute and Chronic Diseases/ Conditions

A. Human Immunodeficiency Virus
B. Tuberculosis

C. Malaria
D. Hepatitis
E. Thyroid Diseases
F. Diabetes
G. Hypertension
H. Depression
I. Headaches
J. Substance Abuse
K. Urinary Tract Infections
L. Vaginitis
M. Pelvic Inflammatory Disease

Unit VII │ Climacteric/Menopause–End of the Reproductive Period

A. Definitions:
    1. Perimenopause;
    2. Menopause
B. Physiological Changes During Menopause
C. Physical and Psychological Aspects
D. Clinical Therapy:
    1. Hormone Therapy;
    2. Complementary and Alternative Therapy;
    3. Risk Factors for Osteoporosis;
    4. Prevention and Treatment of Osteoporosis
E. Nursing Process Applied in the Care of the Menopausal Woman

Unit VIII │ Nursing Process Applied to the Care of Women with conditions Affecting the Pelvic Musculature and Vaginal Wall

A. Rectocele
B. Cystocele
C. Uterine Prolapsed
D. Fistula

Unit IX │ Nursing Process Applied to the Care Women with Conditions Affecting the Cervix and Uterus

A. Cervicitis
B. Endometritis

C. Uterine Displacement
D. Malignancies – Endometrial and Cervical Carcinoma
E. Benign Tumors, Including Uterine Fibromas

Unit X │ Nursing Process Applied in the Care of Women with Conditions Affecting the Ovaries and Fallopian Tubes

A. Salpingitis
B. Ectopic Pregnancy
C. Cysts
D. Tumors

Unit XI │ Nursing Process Applied in the Care of Women with Congenital Abnormalities

A. Imperforate Hymen
B. Cysts
C. Tumors
D. Bicornuate Uterus
E. Hermaphrodite

Unit XII │ Nursing Process Applied in Conditions Affecting the Breasts

A. Infections
B. Mastitis
C. Lumps
D. Tumors
E. Abnormal discharge from nipples

Unit XII │ Referrals

Clinical Component of the Course:

This course is an introductory experience in the provision of comprehensive medical care and counseling services to the elderly, adult and adolescent female patients. Obstetrical conditions and gynecological problems commonly encountered will be the focus of this clinical experience.

Clinical Outcome Competencies:

At the end of this course, the learner will be able to:

- Apply concepts from reproductive anatomy and physiology to care of a woman in labor
- Conduct safe deliveries
- Identify signs of obstetric/gynecological diseases and conditions in women
- Manage obstetric and gynecological diseases and conditions in women

Clinical Placement:

- Female wards
- Outpatient department
- Community

Clinical Skills:

- Teaching women and mothers about safe motherhood
- Assessing postpartum mothers and neonates
- Preventing complications in pregnancy, labor and delivery
- Documenting findings and interventions

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Teaching/Learning Strategies:

- Classroom presentations
- Case studies
- Role plays
- Group exercises
- Visual aid
- Educational games
- Demonstration and return demonstration

- Coaching
- Homework and laboratory assignments
- Care plan

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/charts
- Skeleton

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

Coad J. & Dunstall M. (2011). Anatomy and Physiology for Midwives, 3rd edition, Elsevier Ltd.

Davidson, M., London, M. & Ladewig P. (2019). Olds' Maternal-Newborn Nursing and Women's Health Across the Lifespan (11th ed.), Pearson

Medical-Surgical Nursing II

Credits: 5

Placement within the Curriculum:

Year 2, Semester 2

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
42 instructional hours
126 clinical hours

Prerequisites:

Nutrition, Obstetric Maternity Nursing, Medical-Surgical Nursing I, Pediatric Nursing I, and Ethical and Professional Adjustment.

Course Description:

This course is the second part of the two-part course on medical and surgical nursing practices. The course provides a theoretical foundation and evidence-based and/or best practices in the care of the patient with selected disease conditions. The course includes the principles and practices in chronic illness, disabilities and rehabilitation. The major organ system dysfunctions covering gas exchange and respiratory, cardiovascular, neurologic and sensory, metabolic and endocrine, and immunologic, will be discussed within the framework of the nursing process that includes patient education and psychosocial care. Content related to emergency care of patients will be covered
This course includes a clinical component to provide opportunity to apply knowledge learned in the classroom to clinical situations. The use of the nursing process will be emphasized in the care of patients with medical-surgical conditions.

Course Outcomes:

At the end of this course the student will be able to

- Establish a trusting relationship with the patient/family.
- Provide care of the adult patient with selected medical and surgical dysfunction with best practices and evidence.

- Use the nursing process as a framework in planning, providing and evaluating care of the patient and family.
- Apply the general principles of the care of the adult patient and rehabilitative care.
- Demonstrate psychological support of the patient/family in the provision of care through use of effective communication techniques, and non-verbal and culturally sensitive behavior.
- Teach patient/family as an integral part of nursing care to support self-care, health maintenance and promotion, and continuity of safe care at home.
- Demonstrate beginning skills of collaboration and teamwork with other members of the healthcare team through communication, appropriate and timely reporting and recording of care in the medical record.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe the components of the nursing process.	Appreciate the value of an organized framework such as the nursing process in providing care.	Demonstrate assessment skills in providing care of the patient with medical-surgical dysfunction.
Integrate knowledge of anatomy and physiology, psychosocial concept, patient teaching in care planning.	Respect the patient.	Collect subjective and objective data through appropriate interviewing and physical examination.
Describe the assessment of the patient with medical-surgical dysfunction through appropriate interviewing and physical examination.	Value the importance of establishing a trusting relationship with the patient.	Formulate a plan of care that integrates data and best practices and/or evidence.
Interpret subjective and objective data to formulate a nursing diagnosis, or an impression, or conclusion.	Accept the role and responsibility in providing care and health education to patients and families.	Provide nursing care based on evidence and/or best practices rooted consistent with psychosocial concepts
Discuss the nursing interventions from evidence and best practices for selected medical-surgical dysfunctions.	Respect the patient.	Assess the outcomes of interventions.
Describe appropriate laboratory and diagnostic procedures pertinent to	Appreciate the value of collaboration and teamwork with other members of the healthcare team.	Demonstrate beginning patient teaching skills.

specific medical-surgical dysfunction.		
Describe the care of the patient in emergency situation.	Value confidentiality and patients' rights to privacy in providing nursing care.	Demonstrate beginning skills in caring for the patient in emergency situations.
Describe the medical managements including pharmacological, treatment and surgical interventions in various medical surgical conditions	Value accuracy and safety in providing care to patients.	Administer medications adhering to safety measures and best practices.
Discuss the components of complete and accurate documentation of care.	Value the importance of accurate medical reporting and recording of care	Use appropriate medical terminology in reporting and recording in medical record.

Course Content:

Unit I │ Gas Exchange and Respiratory Function

A. Assessment of Respiratory Function
    1. Anatomic and Physiologic Overview;
    2. Assessment;
    3. Diagnostic Evaluation:
        a) Pulmonary function tests;
        b) Arterial blood gas studies;
        c) Venous blood gas studies;
        d) Pulse oximetry;
        e) Cultures;
        f) Sputum studies;
        g) Imaging studies;
        h) Endoscopic procedures;
        i) Biopsy

B. Respiratory Care Modalities
    1. Non-Invasive Respiratory Therapies:
        a) Oxygen therapy;
        b) Incentive spirometry;
        c) Nebulizer;
        d) Chest physiotherapy;
        e) Postural drainage;

f) Chest percussion and vibration;

2. Airway Management:
    a) Emergency management of upper airway obstruction;
    b) Endotracheal intubation;
    c) Tracheostomy;
    d) Mechanical ventilation;
    e) Nursing care of patient on mechanical ventilation;
3. The Patient Undergoing Thoracic Surgery:
    a) Preoperative management;
    b) Intraoperative management;
    c) Postoperative management

C. Respiratory Tract Disorders: Pathophysiology and Nursing Process:
1. Upper Airway Dysfunction:
    a) Infections of the upper airway dysfunction:
        (1) Rhinitis and rhinosinusitis;
        (2) Pharyngitis;
        (3) Tonsillitis and adenoiditis;
        (4) Peritonsillar abscess;
        (5) Laryngitis;
    b) Obstruction and trauma, upper respiratory airway:
        (1) Epistaxis;
        (2) Nasal obstruction;
        (3) Nose fractures;
        (4) Laryngeal obstruction;
        (5) Cancer of the larynx;
2. Lower Respiratory Tract Disorders:
    a) Atelectasis;
    b) Respiratory infections:
        (1) Acute tracheobronchitis;
        (2) Pneumonia;
        (3) Pulmonary tuberculosis:
            i. Transmission and risk factors;
            ii. Pathophysiology;
            iii. Assessment and diagnostic findings;
            iv. Medical management;
    c) Nursing management & infection control;
3. Pleural Conditions:
    a) Pleurisy;
    b) Pleural Effusion;

c) Empyema;
d) Pulmonary edema;
e) Acute respiratory distress syndrome;
f) Pulmonary hypertension;
g) Pulmonary embolism;
h) Sarcoidosis;

4. Lung Cancer:
    a) Bronchogenic carcinoma
        (a) Pathophysiology;
        (b) Classification and staging;
        (c) Risk factors;
        (d) Clinical manifestations;
5. Chest Trauma:
    a) Blunt and penetrating trauma;
    b) Pneumothorax;
    c) Cardiac Tamponade;
    d) Subcutaneous emphysema;
6. Chronic Pulmonary Disease:
    a) Chronic obstructive pulmonary disease;
    b) Bronchiectasis;
    c) Asthma;
    d) Cystic fibrosis

Unit II │ Cardiovascular and Circulatory Function

A. Overview
    1. Anatomic and Physiologic Overview;
    2. Health History;
    3. Physical Examination;
    4. Diagnostic Evaluation:
        a) Laboratory tests;
        b) Chest X-ray, fluoroscopy and imaging;
        c) Electrocardiography and echocardiography;
        d) Cardiac stress testing;
        e) Cardiac catheterization

B. Coronary vascular disorders: Pathophysiology and Nursing Process
    1. Coronary Vascular Diseases:
        a) Coronary artery disease;
        b) Coronary atherosclerosis vs arteriosclerosis;
        c) Angina pectoris;

d) Acute coronary syndrome and myocardial infarction;

2. Infectious Diseases of the Heart:
    a) Rheumatic endocarditis;
    b) Myocarditis;
    c) Pericarditis;
3. Cardiac Complications:
    a) Heart failure;
    b) Cardiogenic sock;
    c) Pericardial effusion;
    d) Cardiac dysrhythmias:
        (a) Normal electrical conduction;
        (b) The normal sinus rhythm;
        (c) Ventricular dysrhythmias;
    e) Cardiac arrest

C. Peripheral Vascular Disorders: Pathophysiology and Nursing Process
1. Overview
    a) Anatomic and Physiologic Overview;
    b) Assessment of the vascular system;
    c) Diagnostic evaluation:
        (1) Doppler ultrasound flow studies;
        (2) Exercise testing;
        (3) Duplex ultrasonography;
        (4) Computed tomography scanning;
        (5) Angiography;
        (6) Magnetic resonance angiography;
2. Arterial Disorders:
    a) Hypertension;
    b) Arteriosclerosis and atherosclerosis;
    c) Peripheral arterial occlusive disease;
    d) Aneurysms;
    e) Arterial embolism and thrombosis;
    f) Raynaud Phenomenon;
3. Venous Disorders:
    a) Venous thromboembolism;
    b) Chronic venous insufficiency;
    c) Leg ulcers;
    d) Varicose veins;
4. Lymphatic Disorders:
    a) Lymphangitis and lymphadenitis;

b) Lymphedema;
c) Cellulitis;

Unit III │ Neurologic Functions

A. Anatomic and Physiologic Overview
B. Assessment of Neurologic Function
    1. Health History;
    2. Physical Assessment;
    3. Recording and Reporting
C. Diagnostic Evaluation
    1. Computed Tomography Scanning;
    2. Magnetic Resonance Imaging;
    3. Angiography;
    4. Electroencephalography;
    5. Nerve Conduction Studies;
    6. Lumbar Puncture and Examination of Cerebrospinal Fluid
D. Neurologic Dysfunction
    1. Altered Level of Consciousness;
    2. Increased Intracranial Pressure;
    3. Intracranial Surgery;
    4. Seizure Disorder;
    5. Headache;
    6. Cerebrovascular Disorders:
        a) Ischemic stroke;
        b) Hemorrhagic stroke;
    7. Neurologic Trauma
        a) Head injuries;
        b) Brain injury;
        c) Spinal cord injury;
    8. Infectious Neurologic Disorders:
        a) Meningitis;
        b) Brain abscess;
        c) Encephalitis;
    9. Autoimmune Processes:
        a) Multiple sclerosis;
        b) Myasthenia gravis;
        c) Guillain-Barre Syndrome;

10. Cranial Nerve Disorders:
    a) Trigeminal neuralgia;
    b) Bell palsy;
11. Disorders of the Peripheral Nervous System:
    a) Peripheral neuropathies;
12. Oncologic and Degenerative Neurological Disorders:
    a) Brain tumors;
    b) Cerebral metastasis;
    c) Parkinson's disease;
    d) Herniation of a lumbar disc;
    e) Post-polio syndrome

Unit IV │ Sensory Function

A. The Eye: Pathophysiology and Nursing Process
    1. Overview:
        a) Anatomic and physiologic overview;
        b) Assessment;
        c) Diagnostic evaluation;
    2. Diseases of the Eyes:
        a) Impaired vision:
            (1) Refractory errors;
            (2) Visual impairment and blindness;
            (3) Glaucoma;
            (4) Cataracts;
            (5) Corneal disorders;
        b) Retinal disorders
            (1) Retinal detachment;
            (2) Age-related macular degeneration;
            (3) Orbital and ocular trauma;
        c) Infectious and inflammatory conditions
            (1) Dry eyes;
            (2) Conjunctivitis;
            (3) Uveitis;
            (4) Orbital cellulitis;
        d) Orbital and ocular trauma;

e) Systemic diseases:
(1) Diabetic retinopathy;
(2) Hypertension-related eye change

B. The Ear: Pathophysiology and Nursing Process
1. Anatomic and Physiologic Overview;
2. Assessment:
a) Assessing signs and symptoms;
b) Inspection of the external ear;
c) Evaluation of the auditory acuity;
3. Diagnostic Evaluation:
a) Audiometry;
b) Otoscopic evaluation;
4. Disorders of the Ear:
a) Hearing loss;
b) Cerumen impaction;
c) Foreign bodies;
d) Otitis Externa and Media;
e) Tympanic membrane perforation;
f) Meniere disease;
g) Vertigo;
h) Tinnitus;
i) Acoustic neuroma;
j) Trauma

Unit V │ Metabolic and Endocrine Function

A. Anatomic and Physiologic Overview
B. Hepatic Dysfunction: Pathophysiology and Nursing Process
1. Assessment of the Liver;
2. Diagnostic Evaluation;
3. Manifestations:
a) Jaundice;
b) Portal hypertension;
c) Esophageal varices;
d) Hepatic encephalopathy;
4. Hepatitis;
5. Cirrhosis;
6. Cancer;
7. Medical and Surgical Interventions

C. Biliary Disorders: Pathophysiology and Nursing Process
    1. Cholecystitis ;
    2. Cholelithiasis
D. Disorders of the Pancreas: Pathophysiology and Nursing Process
    1. Pancreatitis;
    2. Tumors and Cancers of the Pancreas;
    3. Diabetes: Pathophysiology and Nursing Process:
        a) Classification;
        b) Prevention;
        c) Clinical manifestations;
        d) Assessment and diagnostic evaluation;
        e) Complications:
            (1) Hypoglycemia;
            (2) Hyperglycemia;
            (3) Acute complications:
                i. Diabetes ketoacidosis;
                ii. Hyperglycemic hyperosmolar syndrome;
            (4) Long-term:
                i. Macrovascular complications;
                ii. Microvascular complications;
        f) Special patient education
E. Endocrine Disorders: Pathophysiology and Nursing Process
    1. Overview:
        a) Anatomic and physiologic overview;
        b) Assessment;
        c) Diagnostic evaluation;
        d) Medical and surgical interventions;
    2. Pituitary Disorders:
        a) Diabetes insipidus;
        b) Syndrome of inappropriate antidiuretic hormones;
    3. Thyroid Disorders:
        a) Hypothyroidism;
        b) Hyperthyroidism;
        c) Thyroid tumors and cancers;
    4. Parathyroid Disorders:
        a) Hyperparathyroidism;
        b) Hypoparathyroidism;
    5. Adrenal Gland Disorders:
        a) Pheochromocytoma;

b) Addison's disease (Adrenocortical insufficiency);
c) Cushing's syndrome;
d) Primary aldosteronism

Unit VI │ Immunologic Function

A. Overview
    1. Anatomic and Physiologic Overview;
    2. Assessment of The Immune System;
    3. Diagnostic Evaluation
B. Allergic Disorders: Pathophysiology and Nursing Process
    1. Anaphylaxis;
    2. Allergic Rhinitis;
    3. Dermatitis;
    4. Urticaria
C. Rheumatoid Disorders: Pathophysiology and Nursing Process
    1. Rheumatic Disease;
    2. Rheumatoid Arthritis;
    3. Systemic Lupus Erythematosus;
    4. Scleroderma;
    5. Giant Cell Arteritis;
    6. Osteoarthritis;
    7. Spondylitis;
    8. Gout;
    9. Fibromyalgia

Unit VII │ Various Emergencies and Trauma

A. Assessment and Triaging
B. Psychosocial Care of the Patient
C. Limiting Exposure to Health Risks
D. Treating Patient at Site Of Injury
    1. Providing First Aid;
    2. Providing Cardio-Pulmonary Resuscitation
E. Documentation: Reporting and Recording
F. Emergencies: Medical and Nursing Care
    1. Airway Obstruction;
    2. Drowning;
    3. Bites And Stings;

4. Drug Overdose;
5. Multiple Trauma;
6. Poisoning;
7. Electrical Injuries;
8. Hemorrhage;
9. Unconsciousness;
10. Respiratory And Cardiac Arrest

Unit VIII │ Chronic Illness and Disability

A. Overview of Chronicity
    1. Prevention of Chronic Disease;
    2. General Principles of Nursing Care in Chronic Conditions
B. Overview of Disability
    1. What Is Disability;
    2. Characteristics of Disability;
    3. Nursing Considerations During Hospitalizations;
    4. Health Promotion and Prevention

Unit IX │ Rehabilitative Care

A. Principles and Practices of Rehabilitation
    1. The Interdisciplinary Team;
    2. Assessment of Functional Ability;
    3. Patient Education;
    4. Transitional Care;
    5. The Nursing Process Applied in Rehabilitation Care

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Simulation
- Care planning and concept mapping
- Case studies
- Problem-based learning
- Homework assignments
- Clinical teaching and coaching
- Log book
- Group presentation

Course Expectations:

- Regular classroom and clinical session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

Reference:

Hinkle J.L. & Cheever, K.H. (2018). *Brunner and Suddarth's Textbook of Medical-Surgical Nursing* (14th ed.), Philadelphia: Wolters Kluwer.

Tropical and Communicable Diseases

Credits: 3

Placement within the Curriculum:

Year 3, Semester 1

Duration:

16 weeks (14 instructional and 2 exam weeks)
42 instructional hours
84 clinical hours

Prerequisites:

Teaching in Nursing, Obstetrics Maternity Nursing II, and Medical-Surgical Nursing II.

Course Description:

This course will focus on infectious disease identification, control, and management with a closer examination of those endemic within Liberia. Malaria, TB, and HIV/AIDs will be emphasized in this course. Examination of the shifting multi-level, multi-modal burden of disease. Principles of outbreak documentation and notification will also be covered.

Course Outcomes:

By the end of this course, the student will be able to:

- Describe the major infectious and tropical diseases found in Liberia
- Identify environmental and social determinants of health that precipitate the prevalence of infectious and tropical diseases
- Describe effective control measures to halt the transmission of infectious and tropical diseases in addition to secondary and tertiary levels of prevention
- Collaborate with national programs implementing strategies to combat tropical diseases, especially those found in Liberia

Course Content:

A. Infectious Disease Principles
    1. Surveillance;
    2. Outbreak Response;
    3. Laboratory Diagnostics and Systems;
    4. Factors Contributing to Disease Emergency and Control;
    5. Public Health Preparedness;
    6. Epidemics in National, Regional and Global Communities;
    7. Communicable Diseases:
        a) Transmission of infectious diseases;
        b) Control of spread:
            i. Air;
            ii. Water;
            iii. Soil;
            iv. Protozoa;
            v. Sexually transmitted infections;
        c) The malaria situation in Liberia;
        d) Epidemiology of malaria;
        e) Malaria case management;
        f) Types of malaria;
        g) Treatment strategies for malaria;
        h) Management of malaria in pregnancy;
        i) Malaria and the health system

B. TB and HIV/AIDS
    1. Epidemiology of TB and HIV/AIDS in Liberia:
        a) Pulmonary vs. extrapulmonary TB;
        b) HIV progression:
            i. Clinical stage 1;
            ii. Clinical stage 2;
            iii. Clinical stage 3;
            iv. Clinical stage 4;
    2. TB and HIV/AIDS Screening/Testing;
    3. Treatment Strategies of TB and HIV/AIDS in Liberia:
        a) Antiretroviral agents for HIV;
        b) Drugs used to treat TB;
    4. TB and HIV/AIDS Case Management:
        a) TB and Directly Observed Treatment Short course (DOTS)

C. Protozoal Diseases
D. Bacterial Diseases
E. Mycobacterial Disease: other than TB
F. Spirochetal Diseases
G. Viral Diseases: other than HIV/AIDS:
    1. Hemorrhagic;
    2. Emerging;
    3. Vaccine controlled
H. Emerging Infectious Diseases
I. Fungal Diseases
J. Insect-Related Diseases

Tropical and Communicable Disease Clinical Course Description:

This clinical course will enable to learner to demonstrate using the nursing process to assess client populations with suspected or confirmed exposure to tropical and communicable diseases. Planning primary, secondary, and tertiary communicable disease interventions and evaluation of interventions will be the focus of this clinical course.

Clinical Course Outcomes:

As the end of this semester, the learner will be able to:

- Assess clients for exposure to malaria, TB, and HIV using standard clinical screening and surveillance practices.
- Develop a communicable disease primary prevention intervention
- Implement communicable disease primary prevention intervention to identified population
- Evaluate a communicable disease intervention at primary, secondary, or tertiary level
- Analyze a selected communicable disease pattern within a specific geographic region

Competencies:

Knowledge	Attitudes/Behavior	Skills
Identify common tropical and infectious diseases with special emphasis on Malaria, HIV?AIDS, and TB	Values the special attention to privacy and confidentiality assurances when caring for patients with tropical and infectious diseases	Uses nursing process to manage patient populations diagnosed with infectious diseases
Demonstrates roles and responsibilities for screening, testing, identification, reporting, and managing tropical and infectious diseases		Applies evidence-based care when managing the care for patients with infectious diseases

Teaching/Learning Strategies:

- Lecture
- Discussion
- Group assignments
- Clinical/Laboratory

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 10%
- Attendance 5%
- Midterm Exam 30%
- Final Exam 40%

Clinical Placement:

- Hospital Wards
- Outpatient Departments
- Schools
- Community Health Departments
- Community

References:

Farrar, J., Hotez, P., Junghanss, T., Kang, G., Lalloo, D., & White, N. (2014). *Manson's tropical diseases, 23rd ed.* Elsevier

Hotez, P. (2013). *Forgotten people, forgotten diseases: The neglected tropical diseases and their impact on global health and development*. Herndon, VA: ASM Press.

Psychiatric Mental Health Nursing

Credits: 5

Placement within the Curriculum:

Year 3, Semester 1

Duration:

16 weeks (14 instructional and 2 exam sessions)
70 instructional hours
126 clinical hours

Prerequisites:

Teaching in Nursing, Obstetrics Maternity Nursing II, and Medical-Surgical Nursing II.

Course Description:

This 5 credit course will explore the mental health continuum model of care and how registered nurses assess where clients are along the continuum. The nursing process serves as the assessment mechanism to evaluate the client's biologic, psychological, and social domains. Mental health plans of care will focus on achieving the Sustainable Development Goal (SDG) targets of 3.4 to include mental health when planning client care for those with noncommunicable diseases. Also SDG target 3.5 specifically focuses on prevention and treatment of all substance abuse disorders. Identifying symptom onset, developing client-centered plans of recovery within an integrated, contextually specific, health care model is the goal upon completion of this course.

Course Outcomes:

- At the end of this course, the student will be able to:
- Appraise biologic, psychological, and social assessment data to develop a client-centered plan of care dependent on client's diagnosis within the mental health continuum.

- Demonstrate therapeutic communication techniques based on client's mental health challenges
- Evaluate effectiveness of pharmacologic interventions for mental health based on assessment of biologic, psychological, and social domains of wellness
- Examine the mechanisms of stress in individual, family, and community client populations and develop plan of care based on level of prevention (primary, secondary, or tertiary)
- Assess suicidality and develop, implement, and evaluate immediate, short, and long-term plans of care
- Collaborate with multidisciplinary team and multi-sectoral agencies in providing care to individuals, family, and community with mental health needs

Course Content:

Unit I │Mental Health Care in Contemporary Society

A. Psychiatric-Mental Health (PMH) Nursing and Evidence-based Practice
B. Fighting Stigma and Promoting Recovery
C. Cultural and Spiritual Issues Related to Mental Health Care
D. Patient rights and Legal issues
E. Mental Health Care in the Community

Unit II │Foundations of Psychiatric Nursing

A. Ethics, Standards, and Nursing Frameworks
B. Psychosocial theoretic Basis of PMH Nursing
C. Biologic Foundations of PMH Nursing

Unit III │Contemporary Psychiatric Nursing Practice

A. Communication and the Therapeutic Relationship
B. The PMH Nursing Process
C. Psychopharmacology, Dietary Supplements, and Biologic Interventions
D. Cognitive Interventions in PMH Nursing
E. Group Interventions
F. Family Assessment and Interventions

Unit IV │Mental Health Across the Lifespan

A. Mental Health Promotion for Children and Adolescents
B. Mental Health Promotion for Young and Middle-aged Adults
C. Mental Health Promotion for Older Adults

Unit V │Prevention of Mental Disorders

A. Stress and Mental Health
B. Management of Anger, Aggression, and Violence
C. Crisis, Loss, Grief, Response, Bereavement, and Disaster Management
D. Suicide Prevention: Screening, Assessment, and Intervention

Unit VI │Care and Recovery for Persons with Psychiatric Disorders

A. Schizophrenia and Related Disorders: Nursing Care of Persons with Thought Disorders
B. Depression Management of Depressive Moods and Suicidal Behavior
C. Bipolar Disorders: Management of Mood Lability
D. Anxiety Disorders: Management of Anxiety, Phobia, and Panic
E. Obsessive Compulsive Disorders: Management of Obsessions and Compulsions
F. Trauma- and Stressor-Related Disorders: Management of Posttraumatic Stress
G. Personality and Borderline Personality Disorder: Management of Emotional Dysregulation and Self-Harm
H. Antisocial Personality and Disruptive, Impulse Control and Conduct Disorders: Management of Personality Responses
I. Addiction and Substance-Related Disorders: Nursing Care of Persons with Alcohol and Drug Use
J. Eating Disorders: Management of Eating and Weight
K. Somatic Symptom and Related Disorders: Management of Somatic Problems
L. Sleep-Wake Disorders: Nursing Care of Persons with Insomnia and Sleep Problems
M. Sexual Disorders: Management of Sexual Dysfunction and Paraphilias

Unit VII │Care of Children and Adolescents

A. Mental Health Assessment of Children and Adolescents
B. Mental Health Disorders of Childhood and Adolescence

Unit VIII │Care of Older Adults

A. Mental Health Assessment of Older Adults
B. Neurocognitive Disorders

Unit IX │Care of Special Populations

A. Caring for Persons Who Are Homeless and Mentally Ill
B. Caring for Persons with Co-occurring Mental Disorders
C. Caring for Survivors of Violence and Abuse
D. Caring for Persons with Mental Illness and Criminal Behavior
E. Caring for Medically Compromised Persons

Psychiatric/Mental Health Nursing Clinical Course Description:

This clinical course will enable the learner to demonstrate theoretical knowledge in the development of skills and competencies in assessment and management of individuals with mental health/psychiatric problems. Learners will be expected to collaborate with multi-disciplinary and multi-sectoral teams

Clinical Course Outcomes:

At the end of this clinical practice, the learner will be able to:

- Demonstrate skills in assessment, diagnosis, and management of a variety of mental health conditions in diverse settings throughout the lifespan
- Apply principles of care provision for identified mental health/psychiatric conditions
- Demonstrate therapeutic communication and interpersonal skills when interacting with individuals, families, and communities
- Collaborate with multidisciplinary/multi-sectorial team in delivery of mental health care in a variety of settings
- Implement mental health promotion activities in supportive mental health environments
- Create and maintain therapeutic milieu conductive to the management of a variety of mental health/psychiatric conditions

Clinical Placement:

- Hospital wards
- Outpatient departments
- Community Health Departments
- Emergency rooms
- Communities

Clinical Skills:

- Assessment of mental status of patients
- Counseling
- Application of mental status tools (dependent on symptomatology and clinical site preferences)
- Nursing managed treatments for clients with mental health conditions
- Documentation

Competencies:

Knowledge	Skills	Attitudes
Explains impact of biologic, psychologic, and social domains on individuals, families, and communities mental health	Conduct a mental health assessment	Assess personal biases toward mental health disorders to avoid stigmatization
Distinguishes diagnostic categories of mental health conditions	Adapt therapeutic communication strategy based on assessment of patient's mental health status	Demonstrate respect and support the dignity of all patient populations
Describe psychopharmacologic categories, therapeutic dosage, & side-effects	Refer patients to appropriate recovery program	Value unique psychiatric mental health nursing strategies when caring for special populations

Teaching/Learning Strategies:

- Lecture/Discussion
- Case study simulations

- Peer-to-peer teaching/coaching
- Role playing
    - Assessment
    - Interviewing
    - Group therapy –leader and participant
- Interview non-traditional healers within community
- Reflective journaling

Methods of Assessment:

Written tests
Process recordings
Case studies
Evidence-based report on subpopulation with mental health disorder
Class presentations

Types of Facilities for Clinical Rotations:

Hospitals, community clinics, and other community settings (schools, faith-based recovery programs, shadowing community health workers)

Course Requirements:

- Participate in classroom discussions
- Submit two written in-depth analyses of nurse-client communication
- Submit a nursing care plan for a select3d client
- Submit a client education project
- Oral presentation of clinical assessment of a selected client
- Submit clinical worksheets as assigned
- Participate in clinical pre and post conferences
- Submit mid-term and final evaluations of attainment of clinical competencies
- Submit one journal article critique on a mental health condition

Assessment Criteria - Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

American Psychiatric Nurses Association. (n.d.). Undergraduate Education Faculty Toolkit: Defining and Using Psychiatric-Mental Health Nursing Skills in Undergraduate Nursing Education. Retrieved from American Psychiatric Nurses Association website: https://www.apna.org/i4a/pages/index.cfm?pageid=6018

World Health Organization (WHO). (n.d.). *Mental health included in the UN Sustainable Development Goals.* Retrieved from WHO website: https://www.who.int/mental_health/en/

Evidence-Based Practice (EBP) in Nursing

Credits: 2

Placement within the Curriculum:

Year 3, Semester 1

Duration:

16 weeks (14 instructional sessions and 2 exam sessions)
28 classroom hours

Prerequisites:

Teaching in Nursing, Obstetrics Maternity Nursing II, and Medical-Surgical Nursing II.

Course Description:

This course introduces the student to evidence-based concept as a guide in providing quality and safe nursing care. The student will acquire knowledge and evidence-based practice competencies to appraise research and non-research evidence, assess quality of evidence and the synthesis process. The student will learn how to develop clinical questions, critique published research literature and use research findings to inform evidence-based clinical practice.
Opportunity to apply knowledge and skills in EBP steps will be provided by allowing the student to work in small groups on a PICOT project.

Course Outcomes:

At the end of this course the student will:

1. Use evidence as the basis for clinical decision making in nursing practice.
2. Critique qualitative and quantitative research study based on set criteria.
3. Critique systematic reviews and meta-analysis.
4. Evaluate practice guidelines and standards of care for relevance and credibility.
5. Apply the EBP steps in developing a PICOT group project.
6. Conduct a search strategy.

Competencies:

Knowledge	Attitudes/Values	Skills
Differentiate EBP from quality improvement and research.	Value the importance of evidence-based practice to ensure quality and safe nursing care.	Apply the EBP steps in developing a PICOT group project.
Describe the role of the nurse in promoting research and evidence-based practice.	Appreciate the relationship between critical thinking and EBP.	Conduct a search strategy.
Determine the level of evidence of the research study.	Develop a spirit of inquiry.	Apply critiquing criteria to appraise a qualitative research study.
Differentiate between primary and secondary sources.		Apply critiquing criteria to appraise a quantitative research study.
Identify the characteristics of a relevant literature review.		Apply critiquing criteria to appraise a systematic review and meta-analysis.
Identify the criteria for appraising quantitative and qualitative studies.		Apply critiquing criteria to evaluate practice guidelines and standards of care.
Identify the criteria for appraising a systematic review and meta-analysis.		Screen a non-research article for relevance and credibility.
Identify the criteria for critiquing practice guidelines and standards of care.		
Explain the translation of research findings in building an evidence-based nursing practice.		

Course Content:

Unit I │Introduction

A. Definition of EBP: The Model

B. Differences: Quality Improvement, Research, and EBP
C. Research Utilization: Samples of Studies That Impacted Health Care
D. Nursing Role in EBP
E. EBP and the Nursing Process
F. Critical Thinking and EBP
G. Cultivating a Spirit of Inquiry

Unit II │Steps of EBP

A. Asking the Clinical Question
    1. Sources of EBP Problems:
        a) Problem-focused (foreground question);
        b) Knowledge-focused (background question);
    2. Strategies for Defining EBP Problem;
    3. Developing an Answerable EBP Question:
        a) P: patient, population, problem;
        b) I: intervention;
        c) C: Comparison with other interventions;
        d) O: Outcomes that are measurable;
        e) T: Time frame, if appropriate
B. Searching for the Best Evidence
    1. EBP Steps:
        a) Identify the type of PICOT questions and find the keyword;
        b) Determine the level of evidence that best answers the question
            (1) Hierarchy of evidence for intervention studies;
        c) Select relevant databases to search, examples
            (1) PubMed Central Homepage;
            (2) CINAHL;
            (3) Cochrane Library;
            (4) Google Scholar;
        d) Streamline research
            (1) Use database controlled vocabulary (“MeSH terms”);
            (2) Combine searched by using Boolean connector “AND”;
            (3) Limit the final search by defining parameters
C. Critical Appraisal of the Research Evidence
    1. Summaries of Multiple Studies:
        a) Systematic reviews;
        b) Meta-analysis;

2. Types of Individual Studies:
    a) Experimental;
    b) Quasi-experimental;
    c) Non-experimental;
    d) Descriptive;
    e) Predictive;
    f) Explanatory;
    g) Time-dimensional design;
    h) Qualitative design;
3. Interpreting Primary Research Evidence:
    a) Measures of validity;
    b) Measures of reliability;
    c) Measures of precision;
4. Appraising Strength and Quality of Research Evidence:
    a) Grading the quality of research evidence;
5. Critical Appraisal:
    a) Critiquing qualitative research;
    b) Critiquing quantitative research;
    c) Critiquing systematic reviews and meta-analysis

D. Evidence Appraisal: Non-Research Articles
1. Summaries of Research Evidence:
    a) Clinical practice guidelines;
    b) Consensus/Position statement;
    c) Literature reviews;
    d) Interpreting evidence from summaries of research findings;
2. Expert Opinion;
3. Clinician Experience

E. Translation
1. Model for Translation;
2. Pathways to Translation;
3. Creating an Action Plan for Translation;
4. Planning for Sustainable Change

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Classroom presentations
- Internet
- Small group project
- Homework assignments

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Recommended Internet sites

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Research Critique Assignments (3) 30%
- Evidence-based project proposal 40%
- Class presentation 25%

References:

Melnyk, B.M. & Fineout-Overholt, E. (2019). *Evidence-based Practice in Nursing and Health Care: A Guide to Best Practice* (4th ed.). Walters Kluwer.

Raff, J. (2013) How to read and understand a scientific article. https://violentmetaphors.com/2013/08/25/how-to-read-and-understand-a-scientific-paper-2/

Scribendi (2019). 101 Free on-line journals and research databases for academics. https://www.scribendi.com/advice/free_online_journal_and_research_databases.en.html

Singh, A., Singh, M., Singh, A. K., Singh, D., Singh, P., & Sharma, A. (2011). Free full text articles: where to search for them: *International Journal of Trichology*, 3(2), 75-9

Nursing Care of the Aging Client

Credits: 2

Duration:

16 weeks (14 weeks instructional and 2 exam sessions)
28 instructional hours

Placement within the Curriculum:

Year 3, Semester 1

Prerequisites:

Teaching in Nursing, Obstetrics Maternity Nursing II, and Medical-Surgical Nursing II.

Course Description:

This course will highlight the differences in physiologic, psychologic, and sociocultural changes that occur within an aging population. In a country like Liberia where greater than 50% of the population is under 25 years of age, the elderly can be forgotten. Providing evidence-based nursing care to an aging population brings specific nursing practice and healthcare policy challenges and benefits

Course Outcomes:

By the end of the course, the student will be able to:

- Using the nursing process, identify specific physiologic and psychologic changes that occur in aging clients and plan primary, secondary, and tertiary prevention interventions to support their health
- Evaluate the client's overall health trajectory and determine if palliative care is a patient-centered care option
- Examine the sociocultural influences on death and dying to develop nursing care plans that respect the dignity of life and death
- Advocate for national health policy actions that demonstrate respect for the aging population's continuing contributions to society

Competencies:

Knowledge	Attitudes/Behaviors	Skills
Describe physiologic and psychologic changes occurring in aging	Respect contributions made by aging populations to society: local, regional, national and international.	Plan developmentally appropriate care for aging clients
Identify local alternative, supportive housing options for elders	Anticipate decision-making difficulties around housing, family caregiving, and end of life care for client and family members	Use evidence-based assessment tools to identify depression, dementia, and delirium
Evaluate policy decisions impact on growing aging population locally, regionally, and nationally		Evaluate the cumulative effects of polypharmacy in the aging population

Course Content:

Unit I │Introduction to Geriatric Nursing

Unit II │ Assessment and Management

A. Review of Systems

Unit III │ Health Care Decision Making

A. Palliative care
B. Hospice care
C. Supportive living situations

Unit IV │ Family Caregiving

A. Care Giver Burden
B. Maltreatment Detection

Unit V │ Mental Health Issues in Aging

A. Depression

B. Dementia
C. Delirium

Unit VI │ Geriatric Pharmacology

A. Pain management
B. Polypharmacy
C. Preventing Adverse Drug Events

Unit VII │ Preventing Falls

Unit VIII │ Interventions in Specialty Care

Teaching/Learning Strategies:

- Lecture
- Role play
- Case studies
- Demonstrations
- Coaching
- Homework assignments

Course Expectations:

- Regularly attend classroom sessions
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class
- Complete all assignments and examinations on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 10%
- Attendance 5%
- Midterm Exam 30%
- Final Exam 40%

References:

African Population and Health Research Center. (n.d.). *Aging and development*. Retrieved at https://aphrc.org/?page_id=111

Boltz, M. and Capezuti, E., Fulmer, T., & Zwicker, D. (2016). *Geriatric nursing protocols for best practice, 5th ed.* New York, NY: Springer Publishing Company.

Pediatric Nursing II – Nursing Care of the Sick Child

Credits: 4

Placement within the Curriculum:

Year 3, Semester 1

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours
126 clinical hours

Prerequisites:

Teaching in Nursing, Obstetrics Maternity Nursing II, and Medical-Surgical Nursing II.

Course Description:

This is the second part of a two-part clinical pediatric nursing course. This course is designed to teach students the acute and emergent nursing care of children, from infancy to adolescence. It builds on and assumes knowledge of newborn care, and care of healthy children learned in Pediatrics Nursing I. Application of growth and development, integration of pathophysiology, and teaching and counseling families are integral to this course. Emphasis is placed on the nursing process. Clinical practicum in acute care facilities and laboratory settings assists the student in integrating didactic content into providing safe and effective care to children and their families. This course will also focus on the World Health Organization's Integrated Management of Childhood Illnesses (IMNCI) as the primary strategy for managing illness in under-fives.

Course Outcomes:

At the end of this course the student will be able to

- Describe the roles and responsibilities of a nurse in the provision of care of the sick child.
- Recognize and manage common problems of sick children according to the WHO-IMNCI protocol.

- Provide comprehensive nursing care to a child taking into consideration their growth and developmental stages as well as socio-cultural factors.
- Apply the nursing process in providing care for the sick/ill child.
- Integrate the concept of family-centered pediatric nursing with related areas such as genetic disorders, congenital malformations and long-term care.
- Provide care within the legal and ethical standards pertaining to pediatrics nursing.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe the five most common causes of death in children under five in developing countries worldwide.	Demonstrate respectful and effective interactions with children and their parents.	Apply knowledge of growth and development and the nursing process in the care of children with acute and chronic illness.
Explain the WHO IMNCI concept and its purposes.	Value the importance of using evidence in pediatric nursing care.	Provide care based on evidence, best practices, political, regulatory and economic factors within the context of the nursing process.
Explain the role of the nurse in the implementation of the WHO-IMNCI.	Value the inherent worth and uniqueness of individuals and populations.	Assesses patient values, preferences, decisional capacity, and expressed needs as part of ongoing assessment, clinical interview, implementation of care plan, and evaluation of care
Explain differences and similarities in health care management of acutely ill and chronically ill children	Appreciate the effects of health and social policies on persons from diverse backgrounds	Use quality indicators and core measures to evaluate the effect of changes in the delivery of care.
Critique child care practices commonly followed in Liberia, including developmental expectations for infants, children and adolescents.	Articulate issues at the unit level that impact care delivery of the sick child.	Assess nutritional and immunization status of the child.

Interpret deviations from normal in developmental expectations.	Appreciate that legal, political, regulatory and economic factors influence the delivery of patient care	Collect the health history of the child/adolescent thru effective interviewing techniques.
Explain the pathophysiology and pharmacology of the most common causes of death in young children: Malaria, measles, diarrhea and dehydration, acute respiratory infections, neonatal conditions	Value the need to remain informed of how legal, political, regulatory, and economic factors impact professional nursing practice	Provide nursing interventions in emergent, acute and chronic care based on evidence, best practices and standards of care.
Explain the presentation of the following conditions requiring urgent care: ▪ Malaria ▪ Measles ▪ Diarrhea and dehydration ▪ Respiratory infections ▪ Neonatal fever	Appreciate that care and services are delivered in a variety of settings along a continuum of care that can be accessed at any point.	Provide treatment pre-referral as per protocol including but not limited to first dose of an antibiotic, Vit A, quinine injection, glucose administration for low blood sugar).
Explain general danger signs indicating need for urgent referral: ▪ Child is not eating, drinking or breastfeeding ▪ Child is vomiting everything ▪ Child had seizure (convulsion, spasms) ▪ Child is lethargic or unconscious		Refer patient to appropriate medical personnel for further treatment outside the scope of nursing practice.

Explain the pathophysiology and pharmacology of each of the following conditions: ▪ Pneumonia ▪ Diarrhea ▪ Dehydration ▪ Fever ▪ Malaria ▪ Measles ▪ Meningitis ▪ Ear problem ▪ Malnutrition ▪ Anemia		Provide treatments in the clinic, such as oral rehydration therapy, Vitamin A and immunization.
Outline supportive care for young infants and children needing referral: ▪ First dose of medication ▪ Warmth ▪ Prevent low blood sugar ▪ Provide fluids		Administer medications to children using safety and best practices.
		Teach parents how to give specific treatment at home including proper nutrition of the child.
		Assess/re-assess effectiveness of intervention during initial encounter and at follow-up.
		Demonstrate in simulation or role play identification and use of appropriate case management charts from IMNCI
		Demonstrate management of traumatic injuries in children.

Course Content:

Unit I │ Principles of Management of Acutely Sick Child

A. Integrated Management of Childhood Illnesses

B. The Care of the Sick Child
C. Integrated Management of Neonatal & Childhood Illnesses (IMNCI)
D. The Ministry of Health Has Adopted IMNCI as the Approach for Management of Illnesses in Children
    1. Objectives:
        a) To reduce mortality and morbidity associated with the major causes of disease in children less than five years of age;
        b) To contribute to healthy growth and development of children;
    2. Strategy:
        a) Addresses the most common childhood conditions;
        b) Introduced in 1995 (WHO & UNICEF) and currently adopted by over 100 countries;
        c) Recommended for all countries with IMR > 40/1000 lbs;
        d) It encompasses both preventive and curative interventions & responds to the felt needs of the population
    3. Three Components:
        a) Health worker skills:
            (1) Case management guidelines and standards;
            (2) Training of facility-based public health providers;
            (3) IMNCI roles for private providers;
            (4) Maintenance of competence;
            (5) Among trained health workers;
        b) Community:
            (1) Care seeking, nutrition;
            (2) Home case management;
            (3) Adherence to recommended treatment;
            (4) Community involvement in health planning and monitoring;
        c) Health system:
            (1) District planning and management;
            (2) Availability of IMNCI drugs;
            (3) Organization of work at health facilities;
            (4) Quality improvement and supervision at health facilities;
            (5) Referral pathways and services;
            (6) HMIS;
            (7) IMNCI and health sector reforms;
    4. Advantages of IMNCI:
        a) Accurate identification of illness;
        b) Focuses on care of the child as a whole and not on the reason for the visit;

c) Ensures integrated management of all prevalent illnesses that the child may present;
d) Ensures the early identification and prompt referral of all seriously ill children;
e) More appropriate and combined treatment;
f) Promotes rational use of drugs;
g) Attention to the health needs of the mother;
h) Strengthening of preventive services;
i) Includes actions to improve parental practices in caring for the child at home;

5. Principle of IMNCI:
    a) All sick children:
        (1) Must be examined for general danger signs;
        (2) Must be assessed for major symptoms and checked for immunization, nutritional assessment, feeding problems and other problems;
        (3) Limited signs are used;
        (4) Group of signs used for classifications than diagnosis for prompt action;
        (5) IMNCI addresses most problems;
        (6) Uses selected essential drugs;
        (7) Counseling is an essential component;
6. IMNCI Provision of Care Activities:
    a) Assess and classify the sick child age 2 months up to 5 years;
    b) Identify and treat the sick child age 2 months up to 5 years;
    c) Council the mother/caretaker;
    d) Conduct follow-up visit;
7. The Process:
    a) For every child assess, classified and treat:
        (1) Possible bacterial infection;
        (2) Neonatal tetanus;
        (3) Possible jaundice;
        (4) Diarrhea;
        (5) Cough or breathing difficulty;
        (6) Feeding problems or low weight;
        (7) Malnutrition and anemia;
        (8) Fever and measles;
        (9) Ear problems;
        (10) Check for general danger signs;

(11) Assess other problems;
(12) Checking for signs of malnutrition and anemia and classifying the child's nutritional status;
(13) Checking the child's immunization status and deciding if the child needs any immunizations today;
(14) Assessing mother's own health;

8. Emergent Care of Life-Threatening Conditions;
9. Family Teaching and Counseling

Unit II │ Care of a Hospitalized Child

A. Hospitalization of the Child
B. Stressors and Reactions Related to Developmental Stages, Death & Dying for Ill/Hospitalized Child
C. Play Activities for Hospitalized Child and Safety Precaution
D. Principles and Practices in the Nursing Care of Hospitalized Child and Family

Unit III │ Nursing Process Applied to the Care of a Child with Selected Disorders

A. Child with Disorders of the Respiratory Disorders
    1. Bronchitis;
    2. Lower Respiratory Tract:
        a) Bronchiolitis;
        b) Pneumonia;
        c) Whooping cough;
        d) Tuberculosis;
        e) Asthma;
        f) Carbon dioxide poisoning;
        g) Sudden death syndrome;
    3. Acute respiratory infection
B. Child with of the Cardiac Conditions
    1. Congenital Heart Disease;
    2. Heart Failure;
    3. Endocarditis;
    4. Rheumatic Fever;
    5. Hypertension;
    6. Coronary Artery Disease (CAD)
C. Child with of the Gastrointestinal System
    1. Cleft Lip;

2. Cleft Palate;
3. Appendicitis;
4. Peptic Ulcer;
5. Bowel Obstruction;
6. Pyloric Stenosis;
7. Intussusceptions;
8. Malrotation;
9. Abdominal Hernias;
10. G.I. Bleeding

D. Child with of the Genitourinary System Client with Renal Dysfunction
1. Polycystic Kidney Disease;
2. Hydronephrosis;
3. Urinary Tract Infection;
4. Nephrotic Syndrome;
5. Glomerulonephritis;
6. Schistosomiasis

E. Child with Hematologic/Immunologic Disturbance
1. Anemia;
2. Sickle Cell Anemia;
3. HIV/AIDS

F. Child with Space Occupying Nervous System Disturbance
1. Brain Tumor

G. Child with Cerebral Disturbance
1. Intracranial Infection:
    a) Bacterial meningitis;
    b) Encephalitis;
    c) Rabies;
    d) Brain abscess;
    e) Seizures;
    f) Epilepsy;
    g) Febrile seizure;
    h) Headache

H. Child with Endocrine Disturbance
1. Diabetes;
2. Thyroid Disorder:
    a) Goiter;
3. Cushing Syndrome

I. Child with Mobility Disorders
1. Fracture;

2. Amputation;
3. Contusions;
4. Dislocation, Sprains, Strains;
5. Osteomyelitis;
6. Skeletal Tuberculosis;
7. Muscular Dystrophy;
8. Club Foot;
9. Congenital Hip Dysplasia;
10. Juvenile Rheumatoid Arthritis;
11. Bone Osteosarcoma

J. Child with Neuromuscular Disturbance
    1. Spinal cord injuries;
    2. Cerebral palsy

K. Child/Adolescent with Reproductive System Disorders
    1. Undescended Testes/Cryptorchidism;
    2. Hydrocele;
    3. Hypospadias;
    4. Inguinal Hernia;
    5. Testicular Torsion;
    6. Imperforated Hymen;
    7. Adolescent Pregnancy

L. Child with EENT Disorder
    1. Tonsillitis;
    2. Otitis Media;
    3. Laryngitis;
    4. Acute Viral Laryngitis;
    5. Conjunctivitis;
    6. Myopia, Retinal Detachment, Pressure in Eyes, Refraction Errors

M. Child with Dental Disorders
    1. Gingivitis;
    2. Dental Caries;
    3. Periodontal Abscess

N. Child with Cancer
    1. Leukemia;
        a) Wilm’s tumor;
    2. Lymphoma
        a) Burkitt's lymphoma;
    3. Osteosarcoma

Unit IV │ Urgent Life-Threatening Conditions: Pathophysiology, Pharmacology, Nursing Management and Concerns in Liberia

A. Pneumonia
B. Diarrhea
C. Dehydration
D. Fever
E. Malaria
F. Measles
G. Meningitis
H. Ear problem
I. Malnutrition

Clinical Component:

The clinical component of the course will enhance the skills and knowledge of the learner, drawn from previous clinical experiences, while working with sick/well children and their families.

Clinical Objectives:

At the end of this clinical course, the learner will be able to:

- Develop individualized nursing care plans
- Deliver appropriate nursing care to the pediatric client based on diagnosis, age and developmental stage
- Work effectively with other members of the health team to improve care of children and their families
- Educate the client and family about available support that can help with difficulties concerning child diagnosis and treatment
- Use relevant cultural norms and practices to communicate with clients, families and team
- Demonstrate good documentation of patient care

Clinical Placement:

- Pediatric units
- Outpatient departments
- Clinics
- Health centers
- Schools

Clinical Skills:

In addition, refer to Competencies stated above**:**

- Assessing the sick child
- Admitting the sick child
- Bathing the sick child
- Calculating pediatric drug dosages and IV fluids
- Administering oxygen
- Inserting naso-gastric tubes and urine catheters
- Preparing a child and family for surgery
- Making bed for the sick child
- Preparing nursing care plans

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions.
- Complete all assignments and examinations on due dates.

Teaching/Learning Strategies:

- Lectures/discussions
- Small group work exercises, role play
- Case study
- Self-directed learning
- Simulations/Demonstration
- Classroom presentations
- Coaching
- Homework and laboratory assignments

Required Resources:

- Handouts/reading materials
- Skills lab
- Anatomical models/charts

Clinical Assessment:

- Written exams
- Clinical logs
- Case presentations
- Reflective diary
- OSCE
- Checklists
- Care plans

Assessment Criteria—Standard Grading System:

- Quizzes 15%
- Assignments 10%
- Attendance 5%
- Midterm Exam 30%
- Final Exam 40%

References:

AMREF, Child Health.

Chopra, M., Binkin, N. J., Mason, E., Wolfhaim, C. (2012). Integrated management of childhood illness: what have we learned and how can it be improved? *Archives of Diseases in Childhood*; 97:350–354. doi:10.1136/archdischild-2011-301191.

Hockenberry, M. J. & Wilson, D. (2018). Wong's Essentials of Pediatric ursing Care of Infants and Children (11th ed.). St. Louis: MO, Elsevier Mosby.

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Road to Health Chart.

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WHO. (2011). Caring for the sick child in the community. *A Training Course for Community Health Workers.* doi:10.1136/archdischild-2011-301191

WHO. (2016). Towards a Grand Convergence for Child Survival and Health. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/251855/WHO-MCA-16.04-eng.pdf?sequence=1

Nursing Administration: Leadership and Management

Credits: 6

Place within the Curriculum:

Year 3, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours
126 clinical hours

Prerequisites:

Information, Communication and Technology (ICT) in the Evaluation of Research, Fundamentals of Nursing I & II, PHC I & II

Course Description:

This course focuses on the professional role of the nurse as a collaborator, leader and provider of care with nursing colleagues and other members of the inter-professional health care team, and within the context of complex health care systems. This course includes leadership and management principles of organizations and power, interprofessional team communication, delegation, prioritization, conflict management, quality and safety, creating a healthy work environment, and advocacy.
This course includes a clinical component to provide opportunities to apply knowledge learned in the classroom to clinical situations. The use of Quality and Safety Education for Nurses (QSEN) competencies, to support evidence-based leadership and management, will include Patient-centered Care, Teamwork and Collaboration, Evidence-based Practice, Quality Improvement, Safety, and informatics.

Course Outcomes:

At the end of this course the student will be able to:

- Apply leadership concepts, skills, and decision making in the provision of high quality nursing care, healthcare team coordination, and the oversight and accountability for care delivery in a variety of settings.

- Demonstrate a basic understanding of organizational structure, mission, vision, philosophy, and values.
- Demonstrate an understanding of the process for how nursing and related healthcare quality and safety measures are developed, validated, and endorsed.
- Evaluate data from all relevant sources, including technology, to inform the delivery of care.
- Demonstrate basic knowledge of healthcare policy, finance, and regulatory environments, including local, regional, national, and global healthcare trends.
- Use inter- and intra-professional communication and collaborative skills to deliver evidence-based, client-centered care.

Competencies:

Knowledge	Attitudes/Values	Skills
Recognize the patient or designee shall determine the processes and structure of the care which matters.	Value patient's ability to recognize and express their needs to others	Navigate with the patient or designee as the center of health and healthcare team navigation to meet patient preferences and expressed needs
Describe scopes of practice and how each member of team demonstrates accountability for performance	Value nurse's contribution to an effective and highly functional team	Collaborate and communicate with all members of the health care team, acknowledging the patient is the center of the team
Demonstrate ability to bring evidence of best practices to the bedside and clinical unit	Value need for ethical conduct and quality improvement	Question rationale for routine approaches that result in less-than-desired outcomes.
Explain the importance of variation and measurement in assessing quality of care	Appreciate that continuous quality improvement is an essential part of the daily work of all health professionals	Use tools (such as flow charts, cause-effect diagrams) to make processes of care explicit

Examine human factors and other basic safety design principles as well as commonly used unsafe practices	Value the contributions of standardization/reliability to safety	Demonstrate effective use of strategies to reduce risk of harm to self or others
Explain why information and technology skills are essential for safe patient care	Value technologies that support clinical decision-making, error prevention, and care coordination	Document and plan patient care in an electronic (or other approved) health record according to institutional standards

Course Content:

Unit I │ Core Competencies for Nursing Leadership and Management

A. Nurses as leaders and managers for safe, high-quality patient care
B. What makes a high-reliability organization
C. Transformational leadership
D. Structural empowerment
E. Exemplary professional practice
F. New knowledge, innovation, and improvements
G. Empirical quality results
H. Legal and ethical aspects of nursing
I. Delegation and Setting priorities

Unit II │ Managing Resources

A. Budgeting
B. Recruiting and Selecting Staff
C. Scheduling
D. Staff Motivation and Development
E. Evaluating Staff Performance
F. Feedback, Coaching, Disciplining, and Terminating Staff
G. Managing Absenteeism, Reducing Turnover, Retaining Staff
H. Dealing with Disruptive Staff Problems
I. Preparing for Emergencies
J. Preventing Workplace Violence
K. Handling Collective Bargaining Issues

Unit III │ Quality and Safety Concepts for Nurse Leaders and Managers

A. Patient-centered care
B. Interprofessional Teamwork and Collaboration
C. Informatics
D. Basic Literature Search Strategies
E. Evidence-based Practice
F. Patient safety

Unit IV │ Nurse Leadership and Management for Quality Improvement

A. Essentials of Quality Improvement
B. Tools of Quality Improvement
C. Quality Improvement and Project Management
D. Future Role of Registered Nurse in Patient Safety and Quality
E. Transition from student to Professional Registered Nurse and Leadership and Management Roles

Clinical Course Description:

This course focuses on the student developing their leadership and management style within the clinical setting. Participation in this clinical course will support competency development in: coordination of patient-centered care, implementation of evidence-based care, interprofessional team collaboration for prioritized clinical decision-making, use of ethics and respect principles in all aspects of practice, technical skill acquisition dependent on clinical setting, regulatory knowledge related to scope of practice, and budgetary and health policy impact of care.

Clinical Outcomes:

- Demonstrate personal leadership style based on specific clinical scenario
- Identify how situational awareness supports clinical leadership decision making
- Develop interprofessional team to effectively implement evidence-based care
- Analyze health care team members' technical skill levels to plan for continuing professional development
- Support health care team's performance to their full scope of practice through appropriate delegation

- Recognize budgetary constraints when recommending quality improvement initiatives
- Anticipate health policy impacts from leadership and management decisions

Clinical Placement:

- Hospital wards (stations)
- Nursing Director's Office
- Outpatient department
- Hospital administration
- Community health department

Teaching/Learning Strategies:

- Lectures
- Classroom Presentations
- Role Plays/Simulation
- Case Studies
- Demonstration
- Coaching
- Reflective Practice journals
- Homework/Pre-class or pre-clinical assignments

Course Expectations:

- Regular classroom and clinical session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examinations on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

American Nurses Credentialing Center. (n.d). Magnet Model. Retrieved from https://www.nursingworld.org/organizational-programs/magnet/magnet-model/

Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., Sullivan D.,…Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook, 55*(3), 122-131. doi:10.1016/j.outlook.2007.02.006

Kelly, P., Vottero, B., & Christie-McAulliffe, C. (2018), *Introduction to quality and safety education for nurses: Core competencies for nursing leadership and management*, 2nd ed. NY, NY: Springer Publishing.

Sullivan, E. (2018). *Effective leadership and management in nursing*, 9th ed. NY, NY: Pearson

Ready for Practice Workshop

Credits: 1

Placement within the Curriculum:

Year 3, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
28 lab hours

Prerequisites:

Completion of all nursing courses with the exception of Nursing Capstone

Course Description:

This is a final skills refinement clinical course to prepare registered nurse students to successfully integrate into clinical practice as a novice nurse. The focus will be on enhancing psychomotor skills, professional communication, assessment skills, safety and organizational skills (especially time management), medication administration, and documentation. Through this skill building final course the student should have gained further confidence in their clinical practice.

Course Outcomes:

By the end of the course, the student will be able to:

- Evaluate their current clinical skills and develop a quality improvement plan for skill enhancement
- Demonstrate safe evidence-based care in a simulated setting
- Interpret verbal and non-verbal communication so as to provide patient-centered care
- Demonstrate a quality head-to-toe assessment
- Organize materials necessary to complete each skill-building session
- Document progress in Ready for Practice Log Book

Course Content:

The course content is student directed. Each student will initially perform two randomly drawn Objective Structured Clinical Examination (OSCE) scenarios. Based on findings from OSCE, students will then start their skills training addressing the competencies identified as needing the greatest amount of enhancement following up with skill enhancement at remaining stations.
Students must complete follow up OSCE if there were more than three deficits noted. If student did not have more than 3 deficits on both OSCE's then they will randomly select one more OSCE to complete and pass the course.

Teaching/Learning Strategies:

- Self- directed modules
- Peer-to-peer coaching
- Demonstration – Return Demonstration
- Reflective journaling
- Active documentation in Ready for Practice Log Book

Course Expectations:

- Regularly attend all clinical sessions
- Come to clinical prepared having completed all reviews of previous material
- Participate actively in clinical scenarios
- Complete all assignments on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

All previous notes and materials from former courses

Nursing Capstone Clinical Affiliation

Credits: 6

Placement within Curriculum:

Year 3, Semester 2

Duration:

252 Clinical hours

Pre-requisites:

All previous semesters of course work must be completed with the exception of the Ready for Practice Workshop.

Course Description:

This course provides learners with advanced clinical experience using evidence-based practice to serve as the foundation for providing safe and quality nursing care. This 252 hour preceptorship will be completed in a variety of in-patient and out-patient settings. In addition to demonstrating refined patient care skills the learner will also refine their leadership and management skills by conducting a clinical unit assessment and writing up a proposal for a quality improvement project.

Course Outcomes:

By the end of this course, the learner will:

- Apply evidence-based measures to complete full clinical shifts caring for two or more patients depending on their acuity
- Design care using evidence-based theory, interprofessional team collaboration, and patient-centered care
- Identify a clinical system issue that is impacting quality and/or safety for patients or health care providers on the unit
- Develop a proposal to address the clinical system issue using continuous quality improvement principles
- Apply nursing ethical principles to all care encounters

Course Content:

- Review patient assignments at the beginning of each shift
- Identify team members and effective communication techniques
- Refer to clinical guidelines as prescribed by the clinical agency
- Complete all required documentation in a timely and accurate manner
- Actively collaborate with clinical preceptor
- Notify clinical preceptor of any issues

Teaching/Learning Strategies:

- Directed self-learning
- Peer-to-peer coaching
- Collaboration with clinical preceptor
- Completion of clinical log
- Assessment of clinical system
- Development of continuous quality improvement proposal
- Presentation of quality improvement proposal
- Attendance at Clinical Capstone seminar

Course Expectations:

- Regular attendance
- Come to clinical setting prepared
- Participate actively on clinical unit
- Compete all assignments by assigned due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

All previous course materials

Nursing Capstone Seminar

Credits: 1

Placement within Curriculum:

Year 3, Semester 2

Duration:

14 hours total (one hour per week)

Prerequisites:

All previous semesters of course work must be completed with the exception of the Ready for Practice Workshop and Nursing Capstone

Course Description:

This weekly one-hour capstone seminar is designed to provide supportive supervision and a place for final semester clinical learners to assess and evaluate their current clinical practice.

Course Outcomes:

By the end of this course, the learner will:

- Reflect upon clinical leadership strengths and weaknesses and how they impact provision of evidence-based, safe, and effective clinical care
- Analyze the duties of clinical and non-clinical team members on the unit to support interprofessional, team-oriented care
- Examine how availability of resources: human, financial, and infrastructure, support the provision of evidence-based, safe, and effective clinical care
- Identify potential or actual ethical issues occurring on clinical unit
- Collaborate with learner and faculty colleagues to assess feasibility of proposed continuous quality improvement project

Teaching/Learning Strategies

- Peer-to peer coaching
- Debriefing
- Team consultation
- Inter and intraprofessional collaboration
- Weekly reflection journals
- Weekly clinical logs

Course Expectations:

- Regular attendance
- Complete all assignments by assigned dates
- Come to seminar prepared to participate and collaborate

Assessment Criteria:

- Attendance 5%
- Assignments:
  - Logbooks 20%
  - Reflective journals 20%
  - Continuous Quality Assurance Proposal 40%
  - Fishbone diagram 15%

References:

Campbell, L., Gilbert, M., & Laustsen, G. (2014). *Capstone Coach for Nursing Excellence*. Philadelphia, PA: F.A. Davis.

Simplified Diagnosis and Treatment

Credits: 3

Placement within the Curriculum:

Year 3, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
28 instructional hours
84 clinical hours

Prerequisites:

Teaching in Nursing, Obstetrics Maternity Nursing II, and Medical-Surgical Nursing II.

Course Description:

This course is designed to expand students' skills in diagnosing and treating common diseases in Liberia. There are 84 hours of clinical component to the course. The students apply previous knowledge and skills of assessment such as obtaining vital signs, history taking and physical examination, interpretation of findings to arrive at a rapid and accurate diagnosis using an algorithm and flowcharts in the "Handbook for Health Personnel in Liberia. The student will also refer to diagnostic cards containing summary of algorithms of rapid diagnostic processes.
The students will learn how to handle emergencies when working is low resource areas of Liberia. The students will integrate knowledge of community health, health education, nutrition, maternal-child care, prenatal care, family planning, environmental sanitation in running clinics and health centers. They will learn how to work with CHVs in delivering care to individuals, families and communities. The course teaches the student to function at the clinic level, linking the clinic with the community, and working with community-level providers.

Course Outcomes:

At the end of this course the student will be able to

- Collect relevant data to perform rapid diagnosis of common disease conditions found in Liberia.
- Provide appropriate treatment for these illnesses using drugs in the formulary form from the Ministry of Health and Social Welfare (MOHSW).
- Refer cases that he/she is not able to diagnose or treat to appropriate medical personnel.
- Assess the culture, beliefs, and health needs and problems of the rural community.
- Appreciate how culture and beliefs influence the dynamic interaction with the community and its people.
- Act as a change agent to improve health in catchment communities of the clinic.
- Work with the Community Health Volunteers (CHVs) and Trained Traditional Midwives (TTMs) to implement strategies to improve and promote health and reduce maternal mortality.
- Identify key, influential community leaders such as elders to use as allies in creating change that improve health of the community.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe the pathology, signs & symptoms and management of common disease conditions.	Value the role of culture, traditions and health beliefs influence the dynamic interaction with the community and its people.	Collect relevant data to perform rapid diagnosis of common disease conditions.
Describe the plan of care to manage these disease conditions.	Appreciate the role of the nurse as a change agent to improve health in catchment communities of the clinic.	Assess the culture, beliefs, and health needs and problems of the patients, families and the community.
Describe the major action/indication, dosage, adverse effects, common side effects and administration of the drugs in the formulary	Value the contribution of CHVs and TTMs in improving and promoting health and reducing mortality.	Provide appropriate treatment for these illnesses using drugs in the formulary form from the MOHSW

Describe the process of change.		Perform the following specific skills. - Assess the type, extent of injury, severity, presence of bleeding of a laceration. - Manage lacerations as per protocol. - Assess the degree, and extent of burn injuries. - Manage burns as per protocol - Rehydrate any degree of dehydration in children and adults - Manage coma, shock, seizures to include assessment, treatment and referral to medical personnel. - Refer surgical abdominal emergencies. - Provide clinic level management for other common selected emergencies. - Manage selected common parasites to include proper diagnosis, assessment and treatment. - Manage different causes of fever. - Manage malaria according to the guidelines of NMCP - Treat diarrhea and amebic dysentery. - Manage symptoms of peptic ulcer. - Perform incision and drainage of abscesses.

		Manage pneumonia to include proper diagnosis, treatment and referral. Choose appropriate antibiotics for likely penicillin-resistant staphylococcal organisms Manage anemias to include proper diagnosis, treatment and referral. Manage pyelonephritis at the clinic level to include ordering appropriate diagnostic tests, treatment, and referral as needed Manage meningitis and tetanus to include early recognition, immediate treatment and referral of patient. Refer patients with leprosy after early recognition of the signs and symptoms. Assess patients presenting with possible tuberculosis. Initiate treatment of TB as per protocol. Refer patients with TB for follow-up. Diagnose epilepsy. Refer patients with epilepsy for further diagnostic work-up and treatment.

		Provide health education using the various methods as part of standards of care. Perform nutritional assessment to recognize early signs & symptoms of malnutrition. Provide nutritional counseling and health education to prevent kwashiorkor and ma Provide appropriate family planning counseling and contraceptive choices.rasmus. Recognize the signs and symptoms of ebola.

Course Content:

Unit I | Review Assessment and Diagnostic Process

A. Rapid Head to Toe Assessment
B. Focused Interviewing for Chief Complaint and History of Present Illness
C. The Diagnostic Reasoning
    1. Interpret:
        a) Level I: Identify significant cues;
        b) Level II: Cluster cues and identify data;
        c) Level III: Draw conclusion about present health status;
        d) Level IV: Determine etiologies and categorize problems;
    2. Verify – Thru Available Tests, Knowledge of Protocol;
    3. Label – Have a Diagnosis;
    4. Record

Unit II | Management of Emergencies:

A. Wounds
    1. Abrasions;

2. Lacerations;
3. Punctured Wounds;

B. Burns
C. Sprains
D. Fractures
E. Dehydration
F. Bleeding and Shock
G. Unconsciousness
H. Dislodgement of Airway Obstruction
I. Seizures
J. Ectopic Pregnancy, Poisoning
K. Snakebite and Other Emergencies

Unit III │ Management of Parasitic Conditions

A. Intestinal Worms
    1. Ascaris;
    2. Hookworm;
    3. Strongyloides;
    4. Trichuris
B. Pinworm and Taenia
C. Intestinal Protozoa:
    1. Giardia;
    2. Entameba Histolytica;
    3. Balantidium Coli
D. Malaria
E. Other Parasites
F. Trichomoniasis
G. Onchocerciasis
H. Schistosomiasis
I. Filariasis
J. Trypanosomiasis
K. Paragonimiasis
L. Other Skin Parasitic Infestations:
    1. Scabies;
    2. Pediculosis;
    3. Bedbugs;
    4. Tungiasis
M. Myiasis

Unit IV │ Management of Acute Illnesses

A. Gastrointestinal and Endocrine Complaints:
    1. Vomiting, Diarrhea and Constipation;
    2. Distention, Melena, Rectal Bleeding and Jaundice;
    3. Gastritis and Abdominal Pain Abdominal Mass, and G.I. Complaints;
    4. Complaints Suggesting Thyroid Problems and Diabetes;
    5. Diagnostic Cards for G.I. and Endocrine Complaints

Unit V │ Management of Fevers and Cellulitis

A. The Causes of Fever
B. Identification of the Cause
C. Abscesses
D. Cellulitis
E. Buruli Ulcers/Country Sores

Unit VI │ Management of Respiratory, Cardiovascular, Urinary and Reproductive Systems Complaints

A. Respiratory
    1. Fresh Cold;
    2. Sore Throat;
    3. Cough;
    4. Wheezing
B. Cardiovascular
    1. Heart Palpitation;
    2. Shortness-of-Breath;
    3. Chest Pain;
    4. Anemia;
    5. Hypertension
C. Urinary
    1. Dysuria;
    2. Frequency;
    3. Hematuria;
    4. Difficulty Urinating;
    5. Flank Pain;
    6. Urethral Discharge

D. Reproductive
    1. Vaginal Discharge;
    2. Infertility;
    3. Impotence;
    4. Review of Diagnostic Cards for These Four Systems;
    5. Review of Other Selected Acute Illnesses

Unit VII │ Management of Head and Nervous System Complaints

A. Anxiety
B. Depression, “Open Mole”, Psychosis
C. Stroke
D. Meningitis
E. Tetanus
F. Headache
G. Eye Complaints
H. Earache
I. Nosebleed

Unit VIII │ Management of Bone, Joint, Muscle, Swelling, Malnutrition and Skin Complaints

A. Bone Pain
B. Joint Pain
C. Joint Swelling
D. Ascites
E. Edema
F. Muscle Weakness
G. Malnutrition
    1. Kwashiorkor and Marasmus
H. Skin Complaints
    1. Review of Diagnostic Cards for Head, Nervous System, Bone, Muscle, Swelling, Malnutrition and Skin;
    2. Review of Selected Acute Illnesses

Unit IX │ Management of Chronic Illnesses

A. The Role of the Nurse in the Prevention, Diagnosis and Treatment of:
    1. HIV;
    2. Leprosy;

3. TB;
4. Heart Failure;
5. Hypertension;
6. Diabetes;
7. Epilepsy;
8. Rheumatoid Arthritis;
9. Sickle Cell Anemia

Unit X │ Community Health and Preventive Medicine

A. Health Education/Behavior Change Communication (BCC) Activities
B. Nutrition – Essential Nutrition Actions (ENA)

C. Provision of Health Care Services
    1. Children's clinics – Expanded Programs on Immunizations (EPI)
D. Prenatal Clinic
E. Basic Emergency Obstetric and Newborn Care (EmONC) - Signal Functions and Essential Newborn Care
F. Obstetrical Emergencies For Non-Midwives
G. Home-Based Maternal and Newborn Care
H. Kangaroo Mother Care, Chlorhexidine for Cord Care
I. Community-Based Family planning (CBFP) Programs
J. Outreach Programs and Disease Surveillance
K. Reportable Diseases
L. Environmental Sanitation

Unit XI │ Working with Community Health Workers/Volunteers - Training and Supervising

A. The Role of the Nurse in Primary Health Care
B. Training for Community Members - Adult Education Principles
C. Supportive Supervision of Community Level Providers
D. Delegation
E. Health Education and BCC at Community Level
F. Provision of Quality Services by Community Level Workers/Quality Improvement at Community Level
G. Record Keeping and Reporting by Community-Level Providers
H. Documentation of Care

Clinical Component:

The clinical component of this course will provide the learner with an opportunity to enhance basic nursing skills acquired from previous clinical courses. It provides opportunity for in-depth and more focused assessment and treatment of patients in real-life settings. The student also is given the opportunity to collaborate and consult with members of the health team.

General Clinical Objectives: (Refer to the specific competencies stated above)

- Conduct comprehensive health assessment of a patient using appropriate assessment tools
- Document data gathered from assessment accurately.
- Interpret laboratory findings
- Diagnose patient's illness correctly
- Assess own strengths and weaknesses in the implementation of the nursing process
- Collaborate with members of the health team for provision of quality nursing care
- Observe confidentiality in managing patient's information.

Clinical Placement:

- Hospital/health centers (OPD, wards, emergency room, intensive care units)
- Clinics
- Clinical skills laboratory

Clinical Skills:

- Weighing
- Measuring height
- Measuring blood pressure
- Reading pulse
- Assessing hearing
- Assessing visual acuity
- Assessing reflexes
- Documenting findings

Clinical Assessment:

- Practical exams
- OSCE
- Reflective diary

Resources:

- Sphygmomanometer and stethoscope
- Tuning fork
- Ophthalmoscope
- Tongue blade
- Tape line
- Snellen's chart
- Percussion hammer
- Height board

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Demonstrations
- Handbook assignments
- Handouts
- Illustrations
- Discussions
- Reflective diary
- Case reports

Course Expectations:

- Regular classroom and laboratory session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examination on due dates

Required Resources:

- Handouts/reading materials
- Skills lab
- Simulation – Lab

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 10%
- Attendance 5%
- Midterm Exam 30%
- Final Exam 40%

References:

Diagnostic Cards
Handbook for Health Personnel in Rural Liberia, 3rd ed. 2009.
Jarvis, C. (2019). Physical Assessment and Health Assessment (8th ed.). St. Louis: MO, Elsevier
King, F.S., Burgess, A. Quinn V. J. and Osei A.K. (2016). Nutrition for Developing Countries (3rd ed.), Oxford University Press.
Road to Health Cards