#### NURSING COMPUTER SOFTWARE

## Level 1- Semester 1

## Nur 1025/ 1025L Fundamentals of Nursing/ Clinical Lab

#### RECOMMENDED AT ONSET OF COURSE:

• <u>Successful Test- taking Tips for Windows: (Copyright 1998)</u> Test-Taking Tips for Beginners:

<u>Successful Problem Solving and Test taking for Beginning Nursing Students</u>, <u>Version 1.1:</u> Units 1 and 2 are tutorials covering test taking tips and skills followed by questions with rationales for choices. Units 3, 4, and 5 are more specific to nursing and cover therapeutic communication techniques, selecting priorities, nursing process, nursing skills, and pathology. Units 3, 4, and 5 may contain content that is too advanced for the beginning Nursing student but would benefit the nursing student in Level 2.

<u>Unit 1:Understanding the Question</u>

*Unit 2: Test- taking Strategies* 

*Unit3: Communication questions* 

*Unit 4: Selecting priorities (Maslow's Hierarchy)* 

Unit 5: Nursing Process

- <u>The Language of Medicine</u>, 5<sup>th</sup> <u>edition</u>: (Copyright 1996) Teaches medical terminology through tutorial and quizzes pertinent to each body system and medical specialty. Covers basic word structure, suffixes, and prefixes system by system. Variety of quizzes includes matching, multiple choice and short answer.
- PDS Clinical Education Software: (Copyright 1997)
  Abbreviations and Equivalents:

Drills and practice questions in game format. Divided into abbreviation section and equivalents practice. This program also has a self-test that gives correct answer immediately.

- *Anatomy and Physiology: (Copyright 1997)* 
  - A.D.A.M. Interactive Anatomy (AIA): enhances the study of human anatomy and anatomy-related topics at all levels of education. It includes 3D models, cadaver photographs, pinned anatomical illustrations, and slide show. Internet access.
  - o <u>A.D.A.M. Interactive Physiology (requires CD):</u> Program includes interactive review of the following body systems:
    - <u>Cardiovascular</u>
    - Fluids System
    - Muscular System
    - Nervous System
    - Respiratory System
    - Urinary System

<u>A.D.A.M. Practice Practical 1.0:</u> multipurpose learning tool that gives you wide variety of options to review anatomy and test your anatomical knowledge

• Lippincott's Complete Nursing Reference: (Copyright 1997)

Consists of 5 textbooks on CD:

1. The Lippincott Manual of Nursing Practice:

Part I: Nursing Process and Practice

Part II: Medical Surgical Nursing

Part III: Maternal and Neonatal Nursing

Part IV: Pediatric Nursing

Part V: Psychiatric Nursing

Part VI: Appendices

- 2. Physical Examination and History Taking
- 3. A Manual of Laboratory and Diagnostic Tests
- 4. Nursing Care Plans and Documentation
- 5. Lippincott's Nursing Drug Guide (1997)

# UNIT: Socialization to Professional Nursing Practice Module: Health Care Delivery/ Community Based Settings

• Fundamentals of Nursing:

<u>Unit 3: Settings for Client Care:</u> 10 sample questions covering different to practice.

Nursing Care Plans, Edition 5: (Copyright 2000)

Medical/Surgical Topics:

General:

Extended Care

Nursing care plans by medical diagnosis. Includes medical diagnosis definition, care, setting, related concerns; patient assessment database: by systems and teaching/learning, diagnostic studies, priorities, discharge goals; nursing diagnosis, with desires outcomes, actions and interventions with rationales, potential considerations.

### **Module: Roles Basic to Nursing Practice**

• Fundamentals of Nursing:

<u>Unit5: Roles Basic to Nursing Care-</u> 14 questions covering Communication Process, Leadership, and Teaching Strategies.

**Module: Culture and Ethnicity** 

• *Fundamentals of Nursing*:

<u>Unit1: Culture and Ethnicity:</u> 20 questions dealing with culture, values, and legal issues.

**UNIT: Nursing Process** 

**Module: Nursing Process** 

• Fundamentals of Nursing:

<u>Unit4: Nursing Process-</u> 28 questions covering Nursing Process and Documentation

• Lippincott's Complete Nursing Reference: (Copyright 1997)

The Lippincott Manual of Nursing Practice: Part I: Nursing Process and Practice

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UNIT: Therapeutic Communication and Teaching/Learning Module: Introduction to Therapeutic Communication Module: Patient Teaching and Learning

• Fundamentals of Nursing:

<u>Unit5: Roles Basic to Nursing Care-</u> 14 questions covering Communication Process, Leadership, and Teaching Strategies.

• Nursing Care Plans, Edition 5: (Copyright 2000)

<u>Medical/Surgical Topics</u>:

General:

Psychosocial Aspects of Care

Nursing care plans by medical diagnosis. Includes medical diagnosis definition, care, setting, related concerns; patient assessment database: by systems and teaching/learning, diagnostic studies, priorities, discharge goals; nursing diagnosis, with desires outcomes, actions and interventions with rationales, potential considerations.

**UNIT: Basic Client Needs (Multi-System)** 

**Modules: Principles of Asepsis** 

Care of Patient with Alterations in Skin Integrity/ Wound Care Safety and Body Mechanics

Bowel Elimination
Urinary Elimination
Hazards of Immobility
Comfort and Pain

• Fundamentals of Nursing:

<u>Unit6: Actions Basic to Nursing Care</u>- 114 questions covering Vital Signs, Physical Assessment, Restraints, Environmental Safety, Hospital Acquired Infection, Hand Washing, Isolation and Infection Control, Medication Administration, Post- op Complications, and Wound Care.

<u>Unit 8: Healthy Physiologic Response</u>: 116 questions covering: Aging Process and the following

Skills: Bath, Back rubs, Skin Care, Body Mechanics, Growth and Development, Immobility, ROM, Gait Training, Sleep and Circadian Rhythm, Pain, Nutritional Status, and Elimination.

## Module: Care of the Patient with Alterations in Skin Integrity/ Wound Care

• PDS Clinical Education Software: (Copyright 1997)

PDS Clinical Education Software:

Clinical Nursing Concepts and Skills:

<u>Inflammation, Infection, Wound Healing Scenarios:</u> Pressure Ulcers Scenario

<u>Traumatic Skin Wound - Infected Scenario</u>

### **Module: Urinary Elimination**

• Nursing Care Plans, Edition 5: (Copyright 2000)

*Medical/ Surgical Topics:* 

Renal and Urinary Tract:

*Urinary Diversions/ Urostomy (Post op Care)* 

<u>Urolithasis (Renal Calculi)</u>

Nursing care plans by medical diagnosis. Includes medical diagnosis definition, care, setting, related concerns; patient assessment database: by systems and teaching/learning, diagnostic studies, priorities, discharge goals; nursing diagnosis, with desires outcomes, actions and interventions with rationales, potential considerations.

• PDS Clinical Education Software: (Copyright 1997)

PDS Clinical Education Software:

Adult Health Nursing Concepts and Skills:

**Genitourinary Scenarios:** 

UTI Scenario

#### **Module: Nutrition**

• Anatomy and Physiology (Copyright 1997)

Cookbook Learner:

<u>Fats:</u> Review of fats followed by questions with rationales <u>Guides to Nutrition</u>: Reviews 4 food groups (uses 1985 USDA Guidelines) and suggestions for better eating

<u>Nutrition:</u> reviews amino acids followed by questions <u>Stroke</u>: Causes, warning signs, prevention and nutritional family teaching

### **Module: Hazards of Immobility**

• Nursing Care Plans, Edition 5: (Copyright 2000)

Medical/ Surgical Topics:

<u>Cardiovascular: Thrombophlebitis (Deep Vein Thrombosis):</u> Nursing care plans by medical diagnosis. Includes medical diagnosis definition, care, setting, related concerns; patient assessment database: by systems and teaching/learning, diagnostic studies, priorities, discharge goals; nursing diagnosis, with desires outcomes, actions and interventions with rationales, potential considerations.

# **UNIT: Visual and Auditory Systems**

## Module: Care of the Patient with Minor Visual and Hearing Alterations

• PDS Clinical Education Software: (Copyright 1997)

PDS Clinical Education Software:

Adult Health Nursing Concepts and Skills:

Ear/Eye Scenarios:

Cataract Extraction Scenario

Acute Angle Closure Glaucoma – Iridotomy

Scenario

*Meniere's Disease – Labyrinthectomy* 

# UNIT: Perioperative Nursing (Multi-System) Module: Perioperative Nursing

• *Nursing Care Plans, Edition 5 (Copyright 2000):* 

Medical/Surgical Topics:

General:

Surgical Intervention

Nursing care plans by medical diagnosis. Includes medical diagnosis definition, care, setting, related concerns; patient assessment database: by systems and teaching/learning, diagnostic studies, priorities, discharge goals; nursing diagnosis, with desires outcomes, actions and interventions with rationales, potential considerations.

• PDS Clinical Education Software: (Copyright 1997)

PDS Clinical Education Software:

Clinical Nursing Concepts and Skills:

Perioperative Care Scenarios:

Outpatient Abdominal Surgical Scenario

Pre and Post Op Care Scenario

# **UNIT:** Growth and Development (Multi-System) Module: Stages of Growth and Development

• Fundamentals of Nursing:

<u>Unit2: Promoting Wellness-</u> 15 questions covering Growth and Development and Psychosocial Development.

<u>Unit 7: Healthy Psychosocial Response:</u> 32 questions covering Defense Mechanisms, Growth and Development,

Death and Dying, Sexuality, and Religious Beliefs.

# UNIT: Fluid and Electrolytes- Acid-Base Balance (Multi System) Module: Care of the Patient with Alteration in Acid-Base Balance

• Nursing Care Plans, Edition 5: (Copyright 2000)

Medical/Surgical Topics:

Respiratory:

Respiratory Acid Base Imbalances- Acidosis

Respiratory Alkalosis

*Metabolic and Endocrine Disorders:* 

Metabolic Acidosis

Metabolic Alkalosis

### General:

Fluid and Electrolyte Imbalance

Nursing care plans by medical diagnosis. Includes medical diagnosis definition, care, setting, related concerns; patient assessment database: by systems and teaching/learning, diagnostic studies, priorities, discharge goals; nursing diagnosis, with desires outcomes, actions and interventions with rationales, potential considerations.

• PDS Clinical Education Software: (Copyright 1997)

PDS Clinical Education Software:

Clinical Nursing Concepts and Skills:

Fluid and Electrolyte Balance Scenarios:

Fluid Volume Deficit Scenario

Hyponatremia and Water Intoxification

Scenario

Acid-Base Balance Scenarios:

Crohn's Disease – in Metabolic Acidosis

Scenario

Metabolic Alkalosis Scenario

Respiratory Acidosis Scenario

Respiratory Alkalosis Scenario

<u>Acid- Base Imbalance Learning Objectives: (Copyright 2002) Wisc-online</u>

Basic definitions of blood gas components followed by basic Acid-Base Imbalances.

• <u>Cardiorespiratory Care: (Copyright 1998)</u> Tutorial Menu: The ABG Tutor: Acid –Base Interpretation made simple
with Graphics followed by questions. Covers:

<u>pH basics</u>

<u>Buffer System Basics</u>

<u>Primary Acid- Base Disturbances</u>

<u>Primary Acid- Base Interpretations: Primary</u>

Imbalances with or without Compensation

UNIT: Pharmacodynamics (Multi-System)

Module: Principles of Medication Administration

• <u>PDS Clinical Education Software: (Copyright 1997)</u> PDS Clinical Education Software:

Clinical Nursing Concepts and Skills:

Pharmacodynamics and Administration of Meds. -

Non- Parenteral Scenarios:

Scenario 1: POs, Inhalants, Eve

**Drop Administration** 

Scenario 2:S.L., P.O., Transdermal Patch,

via PEG, Suppository Administration

Pharmacodynamics and Administration of Meds. -

Parenteral Scenarios:

Scenario 1: I.M., I.V, S.Q., I.V.Piggyback

<u>Administration</u>

Scenario 2: S.L., I.V., I.V. Piggyback, and I.M. Administration

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• PDS Clinical Education Software: (Copyright 1997)

PDS Clinical Education Software:

Nurse ProCalc. - Drugs and Solutions Practice:

Drug Label Quiz: Identify brand & generic

names, total dose in vial

Calculation Practice: Conversions- metric/

Apothecary/ household

Calculation-# of tablets, capsules, mL. to

prepare

Dosage Based in Weights/BSA

Solutions- Expressing solution strength,

determining amount of drug/solute in

solution, tube feedings

I.V. Fluids: mL. /hr, gtts. /min.- Volume of fluid

*prescribed* 

Drug dose/Volume

Drug Dosage based on Weight or BSA

Dosage of Drug Infusing/hr. or min.

mL/hr for Titrations (range of doses/

weight to BSA)

## Nur 1025C Fundamentals of Nursing Skills Lab

• PDS Clinical Education Software: (Copyright 1997)

Fundamentally Fun Graphics:

Very basic program that provides practice opportunity for basic nursing skills. Skills include:

- Identifying parts of a syringe
- Filling a syringe
- Identifying injection sites
- Setting IV drip rate
- Filling a medicine cup
- Reading a thermometer
- Taking a blood pressure

### Nur 1060 Adult Health Assessment

• Williams & Wilkins: (Copyright 1995)

<u>Auscultation of Breath Sounds Glossary:</u> list of normal and abnormal terms used and definitions used in assessment of respiratory system.

<u>Auscultation of Breath Sounds:</u> Listen to breath sounds as heard when chest auscultation is preformed through chest wall. This lesson focuses on auscultating breath sounds and identifying the major normal and abnormal adventitious sounds. Includes: instruction on use of stethoscope, preparation of client and how to implement listening techniques used during both anterior and posterior chest examination. This program also identifies the underlying physical mechanisms and pathological conditions related to abnormal breath sounds. *FA Davis:* 

• Davis's Electronic Health Assessment for Nursing: (Copyright 2001) (requires CD)

10 Interactive Case studies where student assesses clients with different complaints. Case studies range from client who presents with sore throat in the ER to clients with Peripheral Vascular Disease, Diabetes Mellitus, HTN, and Wound infection. The student chooses from scenarios ranging from beginner's level, intermediate, advanced to multi-level case studies.

Activities include:

Taking health history Conducting a Physical Exam demonstrating inspection, auscultation, percussion, and palpitation knowledge Formulating a nursing diagnosis with definition, related

# factors, and defining characteristics Case Summary.

• <u>Lippincott's Complete Nursing Reference: (Copyright 1997)</u>
<u>Physical Exam and History Taking:</u> designed for students in health care who are learning to talk with patients and to understand and assess their problems. The first three chapters deal with interviewing, the health history, common and important symptoms, and the assessment of mental status. Remaining chapters review body systems and relevant A & P, describe the sequence and techniques of a physical exam, and help in recognizing abnormalities. The two final chapters deal with clinical thinking and organizing the patient's record.