UEC COLLEGE OF NURSING, OCHADAMU
SEMESTER COURSE OUTLINE

YEAR ONE FIRST SEMESTER

COURSE TITLE: ANATOMY AND PHYSIOLOGY I
COURSE CODE: 110 UNIT: 5

INTRODUCTION:
This course deals with the structures and functions of the normal human body and also identify any changes from normal. It is important for the student nurse to understand that each part of the human body are interdependent in functions. The course content will be well understood by student nurse on exposure to practical aspect. The course recognizes the influence of environmental and technological changes on the normal structural development and functions of the body.

OBJECTIVES:
At the end of this course, the student should be able to:
1. Demonstrate an understanding of Anatomy and physiological term used in describing human body.
2. Describe the basic structures, systems, relations general anatomical characteristics, and functions of the human body.
3. Describe the normal physiological variations and adaptations of the human body in relation to the environment.
4. Apply the knowledge of Human Biology in recognizing any deviation/changes from normal to assist in the management of patient.

COURSE CONTENT

UNIT - I- INTRODUCTION TO ANATOMY AND PHYSIOLOGY

- Definition of Anatomy/Physiology
- Branches of Anatomy

✓ Organization of the human body (Level of structural organization)
✓ Anatomical position, Directional terms and planes
✓ Body cavities
✓ Regions of the body
✓ Basic unit of the body (The Cell)
- Cell Theory
- Cell properties
- Cell division.

✓ Introduction to human genetics
✓ Tissue and membranes:- Types, characteristic and special adaptation.
✓ Organs and systems
✓ Homeostasis and concept of adaptation
✓ Clinical application.

UNIT-II – THE INTEGUMENTARY SYSTEM

✓ The Structure Of The Integumentary System (Skin)
✓ Epidermis, Dermis, Keratinization, Desquamation, Pigments and melanocyte.
✓ Functions of the skin (Protective, Temperature, regulatory functions etc.)

UNIT-III- RESPIRATORY SYSTEM

✓ Organs of respiration: Nose, Pharynx, Larynx, Trachea, bronchi and lungs.

- ✓ Physiology of respiration/Gaseous exchange
- ✓ Control of respiration.
- ✓ Respiratory volumes and capacities.
- ✓ Clinical application

UNIT-IV- CARDIOVASCULAR SYSTEM

- ✓ **Blood.**
  - Formation, composition (Plasma, blood cells) and functions
  - Blood groups- ABO/Rhesus factor
  - Genotype, Clotting mechanism, blood volumes.
- ✓ **The heart**
  - Development
  - Structure
  - Functions- Cardiac activities, conducting system, Electrocardiography(ECG)
- ✓ **Blood vessels**
  - Structure and functions of arteries, veins and capillaries.
  - Blood circulation: cerebral, Splenic and fetal circulation
  - Blood pressure, cardiac rate, pulse, Apex beat, and factors affecting them.
- ✓ **Types of circulation**
  - Pulmonary
  - Coronary
  - Portal and
  - Systematic.
- ✓ **The lymphatic system**
  - The structure, formation and circulation of lymph
  - The immune system

UNIT-V- URINARY SYSTEM

- ✓ Structure and functions of organs of the urinary system: (Kidneys, ureters, urinary bladder and Urethra)
- ✓ The nephrons and urine formation: its composition
- ✓ Physiology of micturition
- ✓ Concept of clearance
- ✓ Fluid and electrolytes balance
- ✓ The urinary buffer system
- ✓ Acid base balance
- ✓ Clinical application.

UNIT-VI- DIGESTIVE SYSTEM

- ✓ General structure and functions of the digestive system
- ✓ Definition of: indigestion, digestion, absorption, elimination
- ✓ Oral cavity, tongue, pharynx, Oesophagus, stomach, teeth, salivary gland.
- ✓ Small intestine, large intestine, intestinal secretions, pancreatic juice, pancreas, Liver, and gall bladder.
- ✓ Digestive juices secretion and control.
- ✓ Physiology of defaecation.
- ✓ Metabolism (Catabolism and anabolism).
  - Carbohydrate metabolism
  - Lipid metabolism
  - Protein metabolism

- Absorption and post absorption state
- Regulation of metabolism
- Krebs cycle.
- Minerals, vitamins, metabolism and body heat

✓ Clinical application.

UNIT-VII- ENDOCRINE SYSTEM

✓ Location, structure and functions.
✓ Endocrine glands, pituitary glands, thyroid, parathyroid, adrenal (Suprarenal) gland, pancreas, testes, pineal body and thymus.
✓ Mechanism of hormone production: release, functions and control.
✓ Effects of over or under secretion of hormones.
✓ Hormone receptors- the chemical nature and chemical relevance.

UNIT-VIII- SUPPORT AND MOVEMENT (MUSCULOSKELETAL SYSTEM)

✓ The skeletal tissues: development, structure and function (compact and cancellous bone tissue)
✓ The skeletal system: composition, structures and functions of skeleton
✓ Appendicular Skeleton- Shoulder and upper limbs, pelvic and lower limbs
✓ Joints and articulations- Types, structures and functions.
✓ The muscle Tissues- development, structures, origin/insertion functions(Skeletal cardiac and smooth muscles)
✓ Clinical application.

UNIT-IX- REPRODUCTIVE SYSTEM.

✓ **The female reproductive system**
- The structure of the female reproductive system: External, Internal and accessory organs.
- The menstrual cycle/menstruation and hormonal control.
- The female sex hormones.
- Ovulation, fertilization and Oogenesis.
- Bony pelvic.
- Pelvic floor (changes during Pregnancy, Labour and puerperium)
- Influence of related hormones on reproductive organ at puberty, pregnancy.
- Menopause.
- Breasts (changes during Pregnancy, Labour and puerperium).
- Physiology of lactation.

✓ **The male reproductive system.**
- The structure of the male reproductive system: External, Internal and accessory organs.
- The male sexual act (mechanism of erection/ejaculation)
- Spermatogenesis
- Influence of reproductive hormones at puberty.
- Andropause.

✓ **Revisions**

COURSE TITLE: FOUNDATION OF NURSING I

INTRODUCTION:

This course is foundation for the practice of Nursing in the homes, communities, health institution and educational institutions. The course is designed to equipped the students with the knowledge, chemical skills, aseptic techniques, legal aspects of nursing, scientific principles used in nursing practice etc.

OBJECTIVES:

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

1. Acquire the knowledge on foundation for the practice of Nursing
2. Be equip with technical skills in basic Nursing Care for total client/Patient management.
3. Discuss the principle of First Aid management and safety measures.
4. Discuss and demonstrate measures used in the management of clients/patients.
5. Understand the theories and models relevant to nursing practice.
6. Explain the component and principles of nursing process
7. Demonstrate competence in drug administration to prevent complications.
8. Discuss the legal of patient
9. Apply principles of aseptic technique and injection safety in the care of patients
10. Explain the concepts and principles associated with emergency and disaster care.
11. Demonstrate the ability to use relevant Basic live-saving and support aids.
12. Identify and sort emergency and life-threatening conditions.
13. Demonstrate the ability to use relevant Basic Life-Saving and Support aids.
14. Manage emergencies and life-threatening situations.

UNIT I: INTRODUCTION

- Definition of Nursing/nurse
- Concept of health and illness
- History definition of a professional nurse and her functions
- The qualities of good professional nurse (polyvalent Nurse).
- History of Nursing
- Brief history of Florence Nightingale
- History of Nursing in Nigeria.
- History of UEC College of Nursing
- Professional Organisations- National and International:- PATNON, NNA, NANNM, WHO, UNICEF, ICN, ANE, RED CROSS, etc.

UNIT II HEALTH CARE INSTITUTIONS

- Health Maintenance Agencies/Institutions
- Members of the health team
- Members of Nursing Personnel

UNIT III ETHNIC AND LEGAL ISSUES

- Nursing ethics and etiquettes
- Code of Ethetics (ICN/ICM/Ethetical principles).
- Ethics and Standard of practice (Confidentiality, informed consent, care of patients properties, controlled substances, Clinical trial, Signing of legal docu ments.)
- Human Right and Patients' Bill of Rights.

UNIT –IV- TOOLS OF NURSING

- Interpersonal relationship
- Communication skills
- Interviewing and counseling
- Principles of reporting and recording
- Selected theories and Models relevant to Nursing Practice e.g Nightingale, Virginia Henderson, Orem's etc

- Problem Solving Techniques.
- Taking and handing over.

UNIT –V-COMFORT AND SAFETY MEASURES:-

- Nursing Process
- Care of hospital equipments
- Simple bed making –Occupied and unoccupied beds.
- Special beds –admission, operation cardiac beds, amputation etc.
- Use of bed accessories- bed cradle, bed table, elevator, air ring, sand bag
- Body support/posture
- Method of lifting patients.
- Safeguarding patient from danger.
- Positions used in nursing
- Nurses responsibility in promoting rest and sleep.
- Reception, Admission and discharges.

UNIT-VI---- BASIC CLIENT/PATIENT CARE.

- Basic human needs (Masclow's hierarchy of human needs)
- Personal hygiene
- Baths-bed/bathroom, baby bath.
- Oral hygiene
- Pressure areas care
- Care of the hair/nails
- Serving bed pan and urinals, diapers
- Feeding of patient
- Standard precautionary measures.

UNIT-VII…. INTRODUCTION TO BASIC DIAGNOSTIC INSTRUMENTS

- Blood pressure apparatus thermometeters, etc
- General examination of patients from head to toe.
- Vital signs and apex beat
- Observation and recording of heights, weight, anthropometric measures.
- Collection and observation of specimen/ precautionary measure:-
- Sputum
- Vomutus
- Urine
- Feaces
- Urine testing.

UNIT-VIII--- STERILIZATION/ASEPTIC TECHNIQUES

- Introduction/principles of aseptic techniques
- Sterilization, disinfection and decontamination .
- Central sterilization department (CSSD)
- Theater sterilization Unit(TSU)
- Techniques in the use of masks/gloves.
- Hand washing techniques
- Isolation techniques and barrier nursing.

INTRODUCTION TO FIRST AID

- Definition of first aid
- Brief history of first aid
- Aims and objective of first aid
- Who is a first Aider
- Qualities of a first Aider
- Responsibility of a first Aider
- ~ Benefits of first Aid
- Basic first aid out fits.
- Basic first aid for home

UNIT II - identity and treatment of different
TYPES OF INJURIES

- Wound:-
- Definition of wound
- Types of wounds
- Treatments of wound
- Complications of wounds
- General first aid rules for the management of wound management of fracture
- Fracture
- Definition of fracture
- Signs and symptoms of fracture
- General first aid rules for the treatment of fracture Dislocation,Sprain and Strain
- Definition
- Signs and symptoms
- Treatment

UNIT III: TYPES OF SHOCK & TREATMENT

- Shock
- Definition
- Causes
- Signs and symptoms
- First aid treatment
- Burns and Scalps
- Definition
- Burns and injuries
- Superficial burns
- Deep burns
- Causes of burns and soaips
- First aid treatment

- **Poisoning**
  - Definition
  - Types V -
  - General first aid Ruie for Treatment of Poison

UNIT IV: EMERGENCY AND DISASTER NURSING

- Various emergencies and disasters.‘
- Natural disasters e.t.c.

UNIT V:-HAEMORRHAGE OR BLEEDING

- Haemorrhage
- Definition
- Causes
- Classification

- Signs and symptoms
- First aid treatment for arrest of hemorrhaged
- External haemorrhagae '
- Internal hemorrhaged
- Dangers associated with the application of a tourniquet
- Pressure point of the body
- Special haemorrhage: -
- Epistaxis
- Haemoptysis g
- Haematemesis
- Uterine bleeding
- Bleeding from a tooth socket
- Bleeding from the scalp
- Bleeding from the ear canal
- Emergency resuscitation
- Artificial Respiration: - ‘
- ln adult
- ln infant or young child
- Steps in external heart compression

UNIT VI: ANIMAL, BITES &INSECT STINGS

- Bites and stings

COURSE TITLE: PRIMARY HEALTH CARE **I**
COURSE CODE: GNS 123
DURATION: 75 HOURS: (30 HOURS — LECTURE; 45 HOURS- PRACTICAL)
CREDIT UNITS: 3 UNITS

INTRODUCTION

The course exposes the students to the rationale for the choice of Primary Health Care as the global option for making healthcare available to all. It is designed to equip students with the knowledge, skills and attitudes essential for teamwork and to efficiently assist individuals, families and communities in identifying, prioritizing and attending to their health needs in a responsible and sustainable manner. A

Course Objectives

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

1. Explain the concepts, rationale and principles of Primary Healthcare.
2. Describe community structure and frmctions.
3. Discuss the strategies for community diagnosis
4. Discuss the principles of IEC in community care.

Course Content

Unit I: Introduction to Primary Health Care

- Historical perspectives, philosophy, concepts and principles of primary health care and public health nursing.
- Health patterns.
- Organization and scope of primary health care services in Nigeria.
- Multidisciplinary and intersectoral team approach to Primary Health Care.

Unit II: The Community: Structure and Functions of Groups and People in the Community

- Community structure: Leadership and decision making in a community.
- Family patterns’
- Stafiing in Primary health care system

- The roles of Primary Health Care workers:
  - Traditional Birth Attendants
  - Village Health Workers
  - Community Health Extension Workers (Senior, Junior)
  - Community Health Officers
  - Midwives
  - Public Health Nurses
  - Community Physicians etc.

- The role of voluntary and non-govermnental agencies in primary health care.
- Functions and responsibilities of the nurse in relation to other workers within the primary health care setting.

Unit III: Community Diagnosis

- Community Diagnosis:
  - Rationale for Community Diagnosis
  - Methods and steps used in Community Diagnosis
- Situation Analysis:
  - Instrument used in situation analysis
  - Steps in conducting situation analysis

Unit IV: Community Mobilization

- Community Mobilization:
  - Rationale for community mobilization in primary health care
  - Steps in community mobilization process
  - Advocacy skills
- Composition and functions of development committees in primary health care services:
  - Village Development Committee
  - Health Facility Development Committee
  - District Development Committee
  - Local Government Area Primary Health Care Development Committee
- Others: State Implementation Committee
- National Policy Implementation Committee

Unit V: Information, Education and Communication(IEC)

- Behavioural Change Communication BCC (Health Education) — Definition, Principles, Methods.
- Application of principles of teaching and learning to BCC
- Guidance and Counseling.
- Communication skills and group dynamics in Primary Health Care.

Unit VI: Clinical Skills in Primary Health Care

- History taking, reporting and recording
- Physical examination
- Diagnostic techniques
- Nutritional assessment:
  - Weighing and charting of weight data
  - Use of mid-upper ann circumference strip (Shaker strip)
- Socio-economic assessment
- Diagnostic skills

- Use of Standing Orders and Midwife Clinical Protocol

COURSE: PHARMACOLOGY I
COURSE CODE: GNS 125
CREDIT UNIT: 2

INTRODUCTION
This course is designed to provide information on the importance of pharmacology in nursing and the responsibilities of the nurse in drug administration. It equips the student with skills in understanding terminologies used in drug administration. Emphasis is laid on preparation and administration of drugs.

Course Objectives
At the end of the course, the student should be able to: ,
1. Explain relevant terminologies and abbreviations used in pharmacology
2. Discuss the importance of pharmacology in nursing.
3. Describe drug classification, sources and basic preparation.
4. Calculate drug dosages.
5. Utilize the rules and regulations guiding the use and administration of drugs.
6. Describe the role of the nurse in the storage, administration, record keeping of drugs and legal implications.
7. Discuss the problems of drug abuse in Nigeria
8. The course is designed to provide information on National Drug Policy, Pharmaco- vigilance and Drug Revolving Fund.
9. Explain the National Drug Policy in the context of the National Health Policy.
10. Explain the Nigerian National Formulary and concept of Essential Drugs and Drug Revolving Fund.
11. Discuss the concept of pharmacovigilance
12. Discuss individual differences in response to drugs.

COURSE CONTENT
UNIT I: INTRODUCTION
- History of pharmacology (Historical Background)
- Definitions of terms: pharmacology, drugs, pharmacokinetics, pharmacogenetics, pharmacodymics, idiosyncrasies
- Terminologies used in pharmacology
- Abbreviations used in pharmacology/ interpretation of presentations.
- Generic(Pharmaceutical)and brand (trade) names of drugs
- Importance of Pharmacology in Nursing
- Complimentary theraphy and its implications for nursing practice in Nigeria.

UNIT II: GEENRAL INFORMATION ABOUT DRUGS
- Sources of drugs and types
- Drug nomenclature
- Drug classification (according to function and formation)
- Introduction to the National Drug policy
- Essential drug
- National Agency for Food and Drug Administration and Control (NAFDAC)
- National Drug Law Enforcement Agency (NDLEA)
- Drug Revolving Fund Scheme

UNIT III: PREPARATION AND ADMINISTRATION OF DRUG

- Various method of preparation of drugs
- Dilution of solutions from stock
- Calculation of drug dosages in relation to stock strength, age/weight, infusion rates, tablets, mixtures and solution
- Administration of drugs in their various forms e.g. tablets, lotion, sodium etc
- Principles and routes of drug administration
- Documentation of drug administration
- The seven rights of drug administration
- Abbreviations used for drug administration e.g. dly, bd, tds, qds etc
- Drug overdose and use of general and specific antidotes
- Drug abuse addition: definition and scope

UNIT IV: SAFETY IN DRUG ADMINISTRATION

- Safety measures ion storage and administration of drugs
- Control measures in drug administration
- Control measures for drug abuse and addition
- Handling and storage of drugs
- Nurses responsibility in administration of drugs.

UNIT V: MECHANISM OF DRUG ACTION

- Pharmacokinetic principles
- Pharmaco dynamics principles:
  - Actions
  - Interaction: synergism, antagonism, drug abortion
  - Adverse drugs reactions: types, manifection and management.
- Idiosyncrasies
- Factors influencing the effecting drugs e.g. age, diet recupation etc.

UNIT VI: PHARMACOVIGILANCE

- Concept of pharmacovigilance
- Patient drug history
- Drug information, interaction and adverse reaction
- Adverse drug reaction monitoring form

COURSE TITLE: USE OF ENGLISH
COURSE CODE: GST 110
UNIT: 2

INTRODUCTION

English Language is the official means of communication in Nigeria. This course is therefore designed to equip students with the knowledge and skills of proper use of English language to facilitate the attainment of sound academic standard, and enhance effective communication.

Course Objectives

At the end of the course, the student should be able to:

1. Demonstrate increased skills in the use of English Language as a means of effective communication.

2. Utilize the knowledge of English Language to write and interpret information, reports, instructions and patient care studies
3. Utilize effective communication skills in influencing the attitude of clients/patients, family and community.

Course Content

Unit I: Grammatical Convention

- Concept and kinds of grammar
- Parts of speech
- Function of part of speech
- Punctuation marks and their uses
- Effective speaking: correct use of stress, rhythm, and intonation pattems.

Unit II: Techniques of Writing

- Pre-writing stage
- Writing stage
- Rewriting stage
- Paragraphs and types of paragraphs
- Essay
- Formal and informal letter writing
- Reports and Records
- Speech writing
- Agenda, memorandum and minutes
- Book review and term paper writing.

Unit III: Reading skills, Summary and Art of Debate

- Concept of reading skills (scanning, skimming, etc.)
- Comprehension
- Summary writing
- Lexis and Structure
- Debates
- References
- General Overview
- Verbal, non verbal
- Speech
- Phonology; diction and flow
- legibility and organization
- Types of sentences and their usage
- Paraphrasing

COURSE TITLE: APPLIED PHYSICS
COURSE CODE: GST III
CREDIT UNIT: 2

INTRODUCTION

The course is designed to provide applied knowledge in physics for application in clinical nursing practice.

COURSE OBJECTIVES

At the end of the course, the students should be able to:

l. Discuss basic concepts in physics as applicable to nursing care.

2. Describe specifically the principles of light, heat, sound, electricity, magnetism etc. in health care interventions.

3. Explain the nature of radio-activity in relation to X-ray, radiological procedures and radiotherapy.

4. Describe precautionary measures in the protection of clients, staff and the community in general during radiological procedures.

Course Content

Unit I: Introduction

- Definition of science.
- Branches of science- physics and their relevance to nursing practice.
- Nature of scientific enquiry and its importance to nursing practice.

Unit II: Molecular phenomena and applications

- Concept of surface tension.
- Definition and common examples of molecular phenomenon.
- States of matter.
- Concept of osmosis.
- Concept of capillarity
- Application in nursing practice.

Unit III: Measurements and Units

- Types of measurements commonly carried out by nurses: length, weight, height, volume, pressure, density, temperature.
- S.I. and conversion of units.
- Instrument used for measurements.
- Pressure measurement; barometer, sphygmornanometer.
- Specific gravity measurement.
- Hydrostatic pressure in fluid
- Characteristic of pressure in fluid
- Measurement of pressure in fluid
- Pascals law application e. g. water mattress
- Boyle's law application
- Bouyancy and Archimedes principle applications e.g. CSF, Amniotic Fluid.
- Viscosity and applications.

Unit IV: Forces and their application in nursing practice

- Force, work, energy and power.
- Application in nursing practice.

Unit V: Machines

- Definition, types and examples.
- Levers: definition, classification and examples.
- Pulleys: definition, classification and examples.

- Application to nursing practice.

Unit VI: Heat

- Definition, terminology and sources of heat.
- Methods of providing heat for the body.
- Definition and measurement of temperature.
- Types of thermometer and uses.
- Heat conversion
- Heat energy
- Heat content of food: calories, caloric values in adult and baby food.

Unit VII: Elasticity

- Definition
- Stress and strain
- Types of stress
- Hook's law
- Young's modulus
- Bulk's modulus
- Shear modulus
- Applications — blood vessels, spring balance, shearing force in decubitus ulcer etc

Unit VIII: Optics and Waves

- Definitions of optics and waves
- Concept of light and its properties.
- Mechanical waves:
- characteristics of sound
- production and transmission
- forced vibrations
- Application in nursing
- Electromagnetic waves and properties
- Light waves
- sources of light
- transmission of light
- propagation of light
- lenses
- reflection of light through lenses
- dispersion of light
- Application: simple lens, human eyes, microscope, common eye defects and corrective mechanism.

Unit IX: Electricity, magnetism and sound waves

- Definition of terms
- Basic principles of electricity, magnetism, sound and waves
- Properties of magnet
- Electromagnetism
- X-ray: prediction, properties and nature in healthcare
- Precautionary measures in radiological procedures
- Application of radiological investigations: Computed Topography (CT) Scan,

- Magnetic Resonance Imaging (MRI), Ultrasound.

Unit X: Practical: Measurement of physical properties

- Application of the principles of physics to clinical nursing practice Visit to radiology and radiotherapy departments.

COURSE TITLE: APPLIED CHEMISTRY
COURSE CODE: GST 112
CREDIT UNIT: 2

INTRODUCTION
The course is designed to provide applied knowledge in chemistry for application in nursing practice.

COURSE OBJECTIVES
At the end of the course, the student should be able to:
l. Explain the basic concepts and principles in chemistry that are applicable to Nursing care.
2. Demonstrate an understanding of the application of knowledge of carbons and hydrocarbons to nursing practice.
3. Explain the classification and structure of organic and inorganic compounds and their impact on nursing practice.
4. Identify basic biochemical compound/substances used in health care.
5. Describe precautionary measures against biochemical substances used in health care.

COURSE CONTENT
Unit I: Introduction

- Definition of science and chemistry
- Branches of science- chemistry and their relevance to nursing practice.
- Nature of scientific enquiry and its importance to nursing practice.

Unit II: Nature of matter
- Physical and chemical properties of matter.
- Physical and chemical change, separation of mixtures
- application: blood, air.
- Chemical symbols of elements.
- Simple formulae and equations.
- Classification of elements, compounds and mixtures.
- Particulate nature of matter: atoms, molecules, ions.
- Symbols, formulae of elements and compounds.
- Atomic structure and chemical combinations.

Unit Ill: Acids, bases and salts
- Definition, properties, and uses
- Measurement of acidity and alkalinity
- Types of salts, uses
- Hydrolysis of salts
- Acid/base titration
- Efflorescent, deliquescent
- Simple volumetric analysis

- Metals and non-metals: examples and properties

Unit IV: Electrolysis

- Definition of electrolysis, electrolytes and non-electrolytes
- Ionic theory, ionization
- Electrolysis, electrolytes, non-electrolytes
- Air composition, pollution and purification
- Water pollution and purification

Unit V: Carbon and carbon compounds

- Carbons, properties of elements and its allotropes
- Introduction to organic chemistry
- Hydrocarbons (saturated).
- Hydrocarbons (unsaturated), alkenes and alkynes
- Introduction to functional group chemistry e. g. alcohols, amines, carbonyls, carboxylic acids etc.

Unit VI: Organic and inorganic compounds

- Organic compounds: definition, classification, examples and structures
- Examples of oxidation products of alcohol
- Aldehydes: examples and uses in nursing practice
- Carbohydrates, proteins, fatty acids, lipids.
- Biological importance of some inorganic substances
- Inorganic compounds: definition, classification, structures and examples.
- Application to nursing practice

Unit Vii: Atomic nucleus and nuclear energy

- Radioactivity: natural and artificial
- Radioactive elements
- Types of radiation from radioactive elements: alpha, beta, gamma
- Nuclear structure and radioactive decay
- Half life
- Radioisotopes
- Nuclear reaction
- Nuclear energy: nuclear fission and fussion
- Health hazards from radioactive substances
- Application in nursing practice

Unit VIII: Practical

- Application of principles of chemistry to clinical nursing practice

COURSE TITLE: SOCIOLOGY
COURSE CODE: GST 113
CREDIT UNIT: 2

INTRODUCTION

This course is designed to facilitate students understanding of concepts and principles in sociology. The relevance of these concepts and their influences on human behavior in heath and illness, are explored.

COURSE OBJECTIVES

At the end of the course, the student should be able to:

1. Describe relevant terms and concepts in sociology.

2. Explain the role of social institutions in the overall wellbeining of individual, family and community.
3. Discuss social-values and cultural determinants of diseases and health-illness behavior.
4. Discuss the relationship within the health care environment, health practitioners and clients.

UNIT 1: INTRODUCTION TO SOCIOLOGY

- Origin of sociology
- Founding fathers of sociology and their contributions
  - Auguste Come, Herbert Spencer, Emile Durkheim, Marx Weber, Karl Marx
- Definition of Sociology
- Sociological concepts
- Importance of Sociology
- Relevance of Sociology to Nursing Profession

UNIT 2: SOCIOLOGICAL PERSPECTIVES

- Social Stratification
  - The significance of Social Stratification
  - Indicators of Social Stratification
- Relationship between Social Class and Health status
- Social and Cultural change
  - Sources of Social and Cultural Change
  - Significance of Social Change
- Population Dynamics
  - Factors determining Population Size
  - Factors determining Population Position

UNIT 3 HEALTH AND ILLNESS BEHAVIOUR

- Culture – the nature, purpose and relevance of culture in Nigeria
- Influence of culture on health and illness
- Pathways to Health Care
- Cultural factors influencing the acceptance and utilization of Health Care Services
- Religious Beliefs and Practices.
- Traditional and Scientific Medical beliefs

UNIT 4: THE ADAPTIVE PROCESS

- Socialization
  - Process of socialization
  - Significance of socialization
  - Agents of socialization
- Social institutions and their effects on the individual
- The family structure, functions of family
- Marriage, importance, types
- Divorce, causes, and its effect on the society.
- Kinship/Kin group

UNIT 5: DEVIANT BEHAVIOUR

- Definition and types
- Individual deviation
- Group deviation
- Sociological explanations of Deviance
- Psychological explanation of Deviance
- Labeling deviance
- Types of delinquencies

UNIT 6: RELATIONSHIPS IN HEALTH CARE ORGANIZATIONS

- Formal organization and its characteristics
- The concept of Bureaucracy and its characteristics
- Organizational culture
  - Inter-professional relationship
  - Intra-personal relationship
  - Inter-personal relationship
  - Nurse-patient relationship

COURSE TITLE: NUTRITION
COURSE CODE: GNS 112
CREDIT UNIT: 2

INTRODUCTION

Nutrition, the science of food nutrients is a very vital aspect of health promotion and maintenance, management and control of health/illness, as well as restoration of optimal health functioning. A host of psychological, physical and socio-cultural factors affect the nutrition, and food habits of individuals, families and communities. Students of nursing need to understand, not only the components of food but also their various roles in health and illness as well as the various factors that affect the selection and eating of food. The knowledge of the principles of nutrition acquired from this course would be applied in the planning and preparation of therapeutic diets. This would be relevant throughout the entire training programme as part of the total care of clients in health and lil116SS.

COURSE OBJECTIVES

At the end of the course, the student should be able to:

1. Demonstrate an understanding of basic food nutrients, and their functions.
2. Discuss digestion, absorption and metabolism of food nutrients.
3. Recognize the influence of various factors affecting nutrition, diet and food habits.
4. Discuss the role of food in health and illness.
5. Demonstrate understanding of how to modify nutritional intake to meet special needs across the life span.
6. Demonstrate understanding of various aspects of nutritional management.
7. Guide individuals and families in planning and making the right choice of food within their income.

COURSE CONTENT

Unit I: Introduction

- Definition of nutritional terms.
- Historical background to the study of nutrition
- Nutrients: chemical structures, sources and functions
- Classification of foods into constituents and nutrients
- Digestion, absorption and utilization of nutrients
- The role of the nurse in promoting good nutrition in:

- Hospital
- In/Out patient department
- Obstetric Unit
- Community

Unit II: Nutritional Needs

- Metabolism of Nutrients
- Metabolic Rate
- Body Mass Index etc.
- Balanced diet

- Changing food needs across the life span
- Nutrition and growth monitoring
- Factors affecting nutrition, food selection and habits e.g.

Unit III

- **Body needs**
  - Cultural and ethnic factors (food taboos, myths and fads)
  - Religion
  - Socio economic status
  - Availability and geographical factors
  - Health status
  - Nutritional Management for Health
- Food production, preservation and storage.
- Food distribution, pricing and effect on consumption for individuals and families
- Budgeting, menu planning and food purchasing.
- Food preparation and handling.
- Education and supervision of food handlers, in homes, hospitals and public places
- Planning a balanced diet for individuals and families.
- Role of governments, organizations, communities and families in food supply

Unit IV: Nutrition in Health/Disease

- Relationship between nutrition and health
- Nutritional Needs in related diseases e. g. protein-energy mahiutntion, scurvy, nckets fit

COURSE TITLE: MICROBIOLOGY
COURSE CODE: GNS 124
UNIT: 3

INTRODUCTION

Medical Microbiology is the study of microorganisms and their impact to human health. Such microorganisms includes-Bacteria, viruses, fungi, protozoans. The study of microbiology at this level helps the student nurse to have a broad knowledge about the different types of organisms, the diseases caused by them, the different diagnostic methods, transmission, prevention and control of those organisms.

COURSE OBJECTIVES

At the end of the course, the students should be able to,

1. Discuss the historical development of microbiology, its contribution and relevance to health
2. Classify microorganisms based on their distinguishing features
3. Have the knowledge of the general principles of disease process and control
4. Discuss the different microorganisms of chemical importance, their pathogenesis, transmission, prevention and control.
5. Discuss the basic processes of immunology and immune response.
6. Carry out microbiological test in food and water samples.
7. Know the classification, importance, methods, risk and hazards of health care waste.

UNIT I: INTRODUCTION

- Definition of term used in Microbiology
- Origin and History of Microbiology
- Classification/Nomenclature of Microbiologists'
- Growth and Multiplication of Micro –Organisms
- Relevance of Microbiology to Nursing.

UNIT II: INFECTIONS PROCESS AND INFECTION DISEASES CONTROL (Infections and Disease Control)

- Sources of infection
- Transmission of infection
- Cause of infection
- Lesions produced by infective agents in the body.
- Chain of spread (causative agent, reservoirs, camers portal of exist, mode of
- transmission, portal of entry and susceptible host)
- General signs and symptoms of infections process.
- Principles of control of infection diseases(Hand washing, waste disposal, handling and disposal of sharps)
- Quarantine, Isolation, contact tracing, case control and notification.
- Disposal of infectious materials and specimens
- Standard precautionary Measures
- Functions of the infectious control unit of the hospital.
- Principles of asepsis reverse Isolation and application of sterile procedures operating Theater.

UNIT III: INTRODUCTION TO IMMUNOLOGY AND IMMUNE RESPONSE (IMMUNITY)

- General principles and practice of Community
- General body resistance to infection (Antigens and Antibodies)
- Types of body defense mechanism against microorganism. (Non –specific and specific)
- Classification of Immunity.
- Abnormal Immune response.
- Auto=immune response
- Anaphylaxis
- Serum sickness
- Acquired Immune Deficiencies

UNIT IV:

- Micro –organisms of Clinical importance
- Normal flora
- Descriptive, mode of transmission, diagnosis, course and treatment of specific micro organisms
- Microbiology of water, milk and food (water –borne, milk born and food –borne diseases)
- Worn, larva and ova.

UNIT V: DIAGONASTIC MICROBIOLOGY

- Collection of specimen for microbiological investigation
- Isolation of micro- organisms from different environments
- Identification of different organisms/ specific distinguishing features
- Incubation and examination of specimen under various test conditions
- Microbiological tests of food, milk and water.

UNIT VI: ENVIRONMENTAL ASPECTS OF MICROBIOLOGY

- Introduction to entomology and parasitological
- Environmental Sanitation and parasitic infections
- Swage and waste disposal
- Water and air pollution
- Health care waste disposal

- Risk and hazards of health care waste
- Classification of health care waste
- Importance of proper health care waste disposal
- Key steps in health care waste management.
- Methods of health care waste disposal.

COURSE: PSYCHOLOGY

Unit I:

- Introduction to Psychology
- Definition of Psychology
- Behaviour learning
- Dangers to health
- Changes in behavior
- Ways to stay healthy
- Objectives/importance of Psychology to Nursing

GROWTH AND DEVELOPMENT

- The significance of studying growth/development
- Definition of growth , development and maturation
- Types of development
- Factors influencing growth and development,
- Specific principles of growth and development.

THE NATURE OF DEVELOPMENT

- Sex determination
- Heredity and environment
- Individual differences

PRE-NATAL DEVELOPMENT

- Stages of pre-natal development
- Characteristics of neonate
- Behaviours of infants falls into four group of activities
- Factors that can make a child to be denial of his rights and needs
- The family circle.
- Negative mother –child relation can be detrimental to the child's stable development

UNIT II:

- Definition
- Attributes or characteristics of personality
- Theories of personality (factors determinary personality
- Types of personality
- Development of personality
  a) By sigmunel freud stages of personality development
  b) Erik Erikson's stages of personality development
  c) Sullivan's stages of personality development
- Personality mental defence mechanism (detination,importance, categories or types of mental defence mechanism)

- Human learning
- Factors which facilitates learning
- Factors affecting learning
- Perception, motivation and learning process
- Emotion
- Sources of Emotion
- Common Emotional pattern
- Effect of Emotion on learning
- Scientific method
- Theory of Basic Human Needs (A. Maslow)
- Bases of mental health in family situation.