

**BAYERO UNIVERSITY KANO
COLLEGE OF HEALTH SCIENCES
FACULTY OF ALLIED HEALTH SCIENCES
DEPARTMENT OF PHYSIOTHERAPY**



BACHELOR OF PHYSIOTHERAPY

STUDENT HANDBOOK

2021

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Dean, Faculty of Allied Health Sciences	Dr. Bashir Kaka, <i>B.Sc (Hons) (BUK), M.Sc. PhD, (Ibadan), MISPMR</i>

FOREWORD

I am delighted to write a foreword ushering the revised handbook of the Department of Physiotherapy, Faculty of Allied Health Sciences, College of Health Sciences, Bayero University Kano. I am happy to state that the Physiotherapy degree program is the oldest in the Faculty and second in the College.

The handbook provides information about the history, growth, and development of the programme from inception till date. It provides general guidelines on rules, regulations, course assessment and evaluation.

I wish to commend the Head of Department and members of Staff of the Department for making the update a reality.

Dr. Bashir Kaka

Dean

Faculty of Allied Health Sciences

Bayero University, Kano

Nigeria

PREFACE

It is my pleasure to welcome you to the Department of Physiotherapy of Bayero University Kano, Nigeria. This revised student hand book is aimed at providing a more up to date and all necessary information for the benefit of our prospective students, new students and even existing students in the department. Our department is dynamic, staffed with vibrant and highly regarded academic/scholars, well equipped with high quality physiotherapy equipment and gadgets, and one of the top-rated in Nigeria. The Bachelor of Physiotherapy degree programme of Bayero University adequately described in this student's handbook so that our students can be equipped with all the information they needed to know for a smooth study. The handbook offers an introduction, history of physiotherapy department, a mission and vision of both the department and University, philosophy and objectives of the programme. In other sections of this hand book, general admission requirements, examination regulations are provided. A list of courses and their content, and list of core academic staff, non-teaching staff and finally a list of servicing departments have been provided.

Furthermore, I wish to also state the all new students should know that the Bachelor of Physiotherapy degree in this university is divided into pre-clinical and clinical components. The preclinical component of the programme (Levels 100, 200 and first semester of 300 Levels) is based and domiciled at the Old campus. Whereas, the clinical component comprising the second semester of 300 Levels, 400 and 500 levels is based at the Aminu Kano Teaching Hospital where the mother department is domiciled.

This handbook has been written to provide physiotherapy students with useful information about the details, policies and procedures of the Department/Faculty, College/University. This version of the handbook has taken into account a number of changes approved by the University Senate in the last 5 years.

I wish you a happy reading of this hand book, while hoping that you will benefit from the information provided in it.

Thank you

Dr. Jibril Mohammed
Head of Department (2021 to date)

Department of Physiotherapy
Faculty of Allied Health Sciences
Bayero University, Kano

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SECTION ONE

1.0. Introduction

Physical Therapy is a dynamic profession characterised by body of knowledge with established theoretical base and widespread clinical applications in the Examination/Assessment, Treatment and Rehabilitation of Neuromusculoskeletal, Cardiovascular, Integumentary and Respiratory disorders, with the aim of preserving, developing and restoring physical function by natural methods. These natural methods are based essentially on movements, manual therapy and the use of physical agencies. These three procedures - Exercise Therapy, Electrotherapy and Massage form the essential elements of Physiotherapy practice and it is therefore referred to as the Central core of Physiotherapy practice.

The components of Physiotherapy are:

- i. Diagnostic Physiotherapy
- ii. Curative/Therapeutic Physiotherapy
- iii. Preventive Physiotherapy
- iv. Rehabilitative Physiotherapy
- v. Health Promotion Physiotherapy

1.1. History of the Department

The Department of Physiotherapy started as the Federal School of Physiotherapy in 1989. It was affiliated to Bayero University, Kano under Faculty of Science in 1995 graduating, B.Sc. Physiotherapy. It became a full department in 2002 in the Faculty of Medicine when it was taken over from Federal Ministry of Health. The BSc programme was upgraded to Bachelor of Physiotherapy (BPT) in 2005 following recommendation by Medical Rehabilitation Therapist Board of Nigeria. IN 2014 the department moved from Faculty of Medicine, and came under Faculty of Allied Health Sciences when College of Health Sciences was established.

The department was run under the Headship of the following staff members:

- | | |
|----------------------------------|--------------|
| 1. Professor Mathew O.B. Olaogun | 1989-1995 |
| 2. Dr. Henry Onuwe | 1996-2001 |
| 3. Dr. Joshua D Jogunola | Jan-Jun 2002 |
| 4. Mr Philip Kodzo | 2002-2009 |
| 5. Dr. Mukadas O. Akindede | 2009-2011 |
| 6. Mr. Sani A. Danbatta | 2011-2012 |
| 7. Dr Isa U. Lawal | 2012-2013 |
| 8. Dr. Rufai Y. Ahmad | 2013-2015 |
| 9. Dr. Shmaila M. Hanif | 2015-2017 |
| 10. Dr. Bashir Bello | 2017-2019 |
| 11. Dr. Bashir Kaka | 2019-2021 |
| 12. Dr. Jibril Mohammed | 2021- Date |

1.2. Vision and Mission of the University

Vision: Bayero University shall be a world-class university in Africa, renowned for its excellence in teaching and research and quality of its products.

Mission: To provide world-class academic and professional training and community service, and to conduct research for the advancement of society, and to produce high quality human resources with entrepreneurial skills for the development of the community, the nation and humanity in general.

Core Values: Humility and Sacrifice; Discipline and Commitment; Integration and Internationalisation; Professionalism and Good Governance; Innovativeness and Creativity; Excellence and Best Practices.

1.3. Vision and Mission of the Department

Vision: To be a centre that facilitates the provision of high-quality physiotherapy services to the community.

Mission: To achieve research competence and provide clinical and research-based training.

1.4. Philosophy of the program

The broad philosophy of the Physiotherapy program is to provide sound academic and professional background for the training of students, who would be capable of working in the relevant areas of endeavour. The Department is also aimed at empowering the students with the intellectual capacity to undertake further training towards specialization.

1.5. Objectives of the Program

The general objectives of the programme are to equip the students with sufficient skills and capabilities to provide effective clinical and community services, research, teaching and quality assurance. Also, to work in collaboration with other members of the health team in providing effective healthcare to patients at all levels.

The specific objectives are:

- i. To produce Physiotherapists who will be able to work in:
 - a. Hospitals, Rehabilitation facilities and other Health Establishments as members of the Health Team.
 - b. Physiotherapy Training Institutions, Research Centres and other Academic environments after undergoing relevant postgraduate training.
 - c. Sports, Physical Fitness and Health Promotion Facilities.
 - d. Industrial workplace and other occupational environments.
- ii. To produce Physiotherapists who will be able to
 - a. To evaluate physical ailments and disabilities, plan and carry out a programme of treatment according to the patient's clinical state.
 - b. To participate in clinical research with others as a means of further study and professional enhancement.
 - c. To acquire, develop and maintain rapport with professional colleagues, patients, their relatives and members of the Health Care Team.
 - d. To acquire, a sense of commitment to patients and the profession at all times.
 - e. To acquire knowledge in health policies, health management, global health issues and socio-cultural health issues.
 - f. To recognize the role of the Physiotherapist in Health Care delivery in the community and in the Health Team.

SECTION TWO

2.0. Admission Requirements and Duration of the Program

2.1. Admission and Graduation Requirements

Candidates seeking admission into the Bachelor of Physiotherapy (BPT) must have passed the Senior Secondary School Certificate Examination/West African Examination Council/National Examination Council with Minimum of 5 credits including English Language, Mathematics, Biology, Chemistry and Physics in not more than two sittings. Candidates can be admitted into the programme at 100 Level or 200 Level. All candidates must register as full-time students; no part-time registration is allowed. Candidates shall graduate with unclassified degree as Pass.

2.1.1. UTME (Level 100)

Candidates must obtain the appropriate points in UTME. Candidates may be required to satisfy any other requirements by the University before admission.

2.1.2. Direct entry (Level 200)

- i) Candidates must have a minimum of 10 points at Higher School Certificate/GCE advanced level equivalent in Biology, Chemistry and Physics.
- ii) Candidates with a Diploma in Physiotherapy with Upper credit from Medical Rehabilitation Therapist Board (MRTB) accredited programs

2.2. Duration of Programme

2.2.1. Minimum Duration

The Bachelor of Physiotherapy (BPT) program shall extend over a minimum period of five (5) academic sessions for entry through UTME and four (4) academic sessions for direct entry.

2.2.2. Maximum Duration

The maximum period of study permissible for the BPT shall be nine (9) academic sessions for entry through UTME and eight (8) academic sessions for direct entry

2.3. Registration

Each student must register and pay the appropriate registration fees at the beginning of each session according to the registration process in operation during that session. The registration process includes getting copies of relevant documents signed and submitted to all relevant places as may be advertised by the University, faculties and departments.

Returning students must complete the registration process within the stipulated period from the date registration starts. A returning student who fails to complete the registration within this period approved for registration shall be deemed to be registering late and shall pay a late registration fee as may be prescribed by the University from time to time.

A returning student who fails to register within the period for late registration shall not be allowed to register. Such a student shall be deemed to have withdrawn, unless he/she provides a reason acceptable to the Senate, in which case he/she can be considered for suspension of studies.

A fresh student must complete the registration process within the stipulated period of the university. Failure to complete the process within this time shall attract late registration fee charges, or forfeiture of the admission. Dean of the faculty, Head of department and Level coordinators shall ensure that the registration process is completed on time. The process is clearly explained and publicized to the students.

2.4 Examination Regulations

The examination regulations for Bachelor of Physiotherapy (BPT) are made in accordance with, and subject to the general provisions of the regulations governing First degree programme in Bayero University Kano.

2.4.1 Eligibility: In order to be admitted to take part in the examination leading to a degree in the Department of Physiotherapy a student is required to complete satisfactorily the course, practical, assignments or project that are laid down for the relevant parts of the programme of studies.

- I) For a student to be allowed to sit for any exams he/she must register for the course and fulfil overall 75% attendance.
- II) Failure to attend classes for a period which exceeds 30 consecutive days except upon approved medical or other grounds, a student will be withdrawn from the programme.

2.4.2 For those in the clinical levels a final comprehensive examination with the participation of both internal and external examiners will be conducted at the end of every academic session.

- i) Internal examiner: Must be a minimum of Lecturer II; any Lecturer less than this grade must be paired with a lecturer of higher rank.
- ii) The external examiner shall be appointed by the senate on the recommendation of the department through the faculty board she/he must have a minimum rank of senior lecturer with extensive experience of teaching in his/her field, and will usually be a member of academic staff of other

universities. Each external examiner shall be appointed for a period covering two (2) academic sessions and is renewable for another two (2) academic session.

- iii) Pass mark: The pass mark for General Studies (GSP), Entrepreneurship (EEP) and level 100 courses is 40%. All other courses are graded and classified as with 50% as Pass mark:

Mark/score	Grade
70% and above	A
60-69%	B
50-59%	C
45-49%	D (for 100 level courses, GSP & EEP courses)
40-44%	E (for 100 level courses, GSP & EEP courses)
0-49%	F

- iv) Mark distribution: This shall consist of 40% for continuous assessment (for courses offered at the Department of Physiotherapy) and 60% for examinations.
- v) Research Project: Each student in the final year shall embark on a departmentally approved research project relevant to his/her course of study before graduation.
- vi) Examination questions for a course are set by the person who teaches the course. The Departmental Examination Officer/Head of Department (Chief Examiner), vets the questions, and submits them to the External Examiner for moderation.
- vii) Fractional marks are to be rounded to the nearest whole number.
- viii) A student who re-sits a course in a level does not earn Credit. A maximum score of 50% (credit pass) shall be recorded for any student who passes a course at a re-sit examination.

2.5 Progression from one level to another

- 2.5.1 **100 Level to 200 Level:** Student must pass all the core subjects (A subject is made up of two or more courses) offered in 100 Level with at least 45%. A candidate who fails only one subject of the subjects registered shall re-sit the particular course(s) failed. A candidate who fails a re-sit exam will be advised to withdraw. A candidate who fails more than one subject at first sitting registered would be advised to withdraw.
- 2.5.2 **200 Level to 300 Level:** A student must pass all the courses registered at Level 200. Students who fail up to $\frac{1}{4}$ of the total credits registered at Level 200 shall re-sit the courses. A candidate who fails more than $\frac{1}{4}$ to $\frac{1}{2}$ of the credits registered or fails re-sit exams shall repeat the level. A candidate who fails more than $\frac{1}{2}$ of the credits registered would be advised to withdraw.
- 2.5.3 **300 Level to 400 Level:** A student must pass all the courses registered at Level 300. Students who fail up to $\frac{1}{4}$ of the total credits registered at Level 300 shall re-sit the courses. A candidate who fails more than $\frac{1}{4}$ to $\frac{1}{2}$ of the credits registered or fails re-sit exams shall repeat the level. A candidate who fails more than $\frac{1}{2}$ of the credits registered would be advised to withdraw.
- 2.5.4 **400 Level to 500 Level:** A student must pass all the courses registered at Level 400. Students who fail up to $\frac{1}{4}$ of the total credits registered at Level 400 shall re-sit the courses. A candidate who fails more than $\frac{1}{4}$ to $\frac{1}{2}$ of the credits registered or fails re-sit exams shall repeat the level. A candidate who fails more than $\frac{1}{2}$ of the credits registered would be advised to withdraw.
- 2.5.5 **At 500 Level:** A student must pass all the courses registered at Level 500 for graduation. Students who fail up to $\frac{1}{4}$ of the total credits registered at Level 500 shall re-sit the courses. A candidate who fails more than $\frac{1}{4}$ to $\frac{1}{2}$ of the credits registered or fails re-sit exams shall repeat the level. A candidate who fails more than $\frac{1}{2}$ of the credits registered would be advised to withdraw.
- 2.5.6 **PLEASE NOTE that** GSP and EEP courses are not used in the determination of progression to the next level of study. However, **students are required to pass all GSP and EEP courses** before graduation.
- 2.5.7 A candidate cannot repeat a class twice. A repeating candidate who fails to progress to the next level of study will be advised to withdraw.

2.6. Competencies and Skills

At the end of the Physiotherapy training programme, graduates shall have acquired skills in:

- I. Comprehensive physical examination and clinical assessment of patient's health to arrive at a physiotherapy diagnosis from the medical diagnosis.
- II. Planning patient's treatment based on; the outcome of patient's assessment, available physiotherapy facilities and precautions to avoid contra-indications to the treatment.
- III. Giving treatment to patient employing evidence-based practice as well as being mindful of the safety of patient, self, equipment and treatment environment.
- IV. Evaluation of outcome of treatment using standard outcome measures or specifically designed outcome measure based on clinical and socio-cultural considerations.
- V. Modifying treatment appropriately based on the outcome of evaluation of treatment.
- VI. Effective and appropriate Communication Skills (Including counselling and psychotherapy).
- VII. Skills for conduction of research including proposal writing, data collection and analysis, interpretation of findings and report writing for dissertation or publications in learned journals.
- VIII. Ability to give physiotherapy services in non-hospital based situations e.g. Community base, sports field, industry, rehabilitation home, private practice, other entrepreneurial situations etc.
- IX. Ability to apply the outcome of clinical researches in patient care.
- X. Practical/Clinical Skills
- XI. Patients assessment skills
- XII. Skills to carry out fundamental procedures in physiotherapy. General skills relating to non-professional subjects such as computer literacy, general communication, administrative, entrepreneurial and organizational skills.
- XIII. Skills for psychotherapy and health education for the preventive and health promotion aspects of physiotherapy.
- XIV. Basic skills of equipment handling and maintenance.

2.7. Behavioural Attributes

The products of the physiotherapy programme shall be physiotherapists who have acquired high level of theoretical knowledge, clinical skill and sense of purpose. They should have a good mastery of the basic physiotherapy procedures, shall exhibit understanding of the concept of health care system and health care. They shall respect the dignity of the patient and exhibit high sense of responsibility in patient care. They shall be law abiding and practice within the ethical limits of the profession

2.8. Conducts during the Clinical Postings

A student must take note of the following:

- (a) Neatness
- (b) Adequate dressing with name tags
- (c) Punctuality
- (d) Signing of log books
- (e) Meeting the minimum attendance
- (f) Respectfulness

2.9. Conducts During Examinations

- (a) It shall be the responsibility of each student to make sure that he/she is registered for appropriate courses and be sure of dates, times and places of the examinations for the registered courses, and to ensure that he/she is in possession of any identity document prescribed for the examinations.
- (b) The appropriate university unit shall ensure that identity documents are available to students at least two weeks before examination.
- (c) Each candidate should be at the examination room at least 30 minutes before the advertised time for the commencement of the exams. He/she is required to supply his own writing and drawing instruments.

- He/she is also required to supply any other examination aids of which the provision is prescribed in rubric of the question paper and announced to candidates in advance as being his own responsibility.
- (d) A student shall bring his/her identity document to each examination and display it in a prominent position on his/her desk.
 - (e) A candidate must show his/her full face when asked to do so by the invigilator for the purpose of identification.
 - (f) A candidate must show both ears when asked to do so by the invigilator.
 - (g) Any book, paper document, examination aid (except as may be provided for in rubric of the question paper and announced to the candidates in advance), handbag or briefcase which is brought to the examination room must be deposited at invigilator's desk, or a place designated for the purpose, before the start of the examination. Under no circumstances must it be placed on or near a candidate's writing desk.
 - (h) Each student shall sign in by completing a line on the attendance register - writing his/her registration number, name, answer booklet numbers and department and then signing. Student should be advised to note their serial number and attendance register number (in case there are more than one registers) for case of signing out.
 - (i) Each student shall also sign out after submitting his/her answer script by signing the appropriate column of the attendance register.
 - (j) A student shall write his/her examination number, but not his/her name, distinctly on cover and on every page of the answer booklet, as well as on any extra sheets used.
 - (k) The use of scrap paper, question paper, toilet tissue, etc, for rough work is not permitted. All rough work must be done in answer booklets and crossed neatly through, or supplementary answer sheets which must be submitted to the invigilator.
 - (l) A candidate arriving late shall be admitted up to **30 minutes** after the start of the examination, but he shall not be allowed extra time. If he arrives more than **30 minutes** late before one half of the total duration of the examination has elapsed, the invigilator may at his discretion admit him if he is satisfied that the candidate has good reason for his lateness, and provided that no candidate has already left. No candidate shall be admitted after half duration of the examination has elapsed. The invigilator shall report on all those admitted late to the Faculty Examination Officer who shall inform the Chief Examiner. The Chief Examiner shall recommend to the Board of Examiners whether to accept the student's paper or not.
 - (m) A student may be permitted by invigilator to leave the examination room during the course of examination provided that:
 - a. No student shall normally be allowed to leave during the first thirty minutes or the last ten minutes of the examination.
 - b. A student who leaves the examination room shall be not re-admitted unless throughout the period of his absence he has been continually under the supervision of an invigilator or examination attendant.
 - c. A student leaving must sign out and hand his script over to the invigilator before leaving if he does not intend to return.
 - (n) No student shall speak to any other student or, except as essential, to the invigilator or make any noise or disturbance during the examination. Smoking is not permitted in the examination hall during any examination
 - (o) A student must not directly or indirectly give assistance to any student or permit any other student to copy from him or otherwise use his papers. Similarly a student must not accept assistance from any other student's papers.
 - (p) A student shall not use any unauthorised ICT device such as mobile phones, tablets, laptops and accessories in the examination hall for any purpose; **and doing so is an offence**. Any student caught shall be considered as **examination malpractice**.
 - (q) A student is responsible for protecting his work so that it is not exposed to other students.

- (r) Any student accused of involvement in examination malpractice should fill in the prescribed form giving his/her own version of events. A student that fails to fill in the form denies him/herself an important opportunity.
- (s) At the end of the exams duration, each student shall stop writing when instructed to do so, and shall gather his scripts together. He shall then remain at his desk until all candidates' scripts have been collected, and he has been given permission by the invigilator to leave. It shall be the candidate's responsibility to ensure that his/her answer scripts are collected by a university official in the examination room before he/she leaves.
- (t) Except for the printed question paper, a student may not remove from the examination room or mutilate any paper or other material supplied.
- (u) Any student who does not abide by the examination rules shall be made to fill the malpractice form and face the exam malpractice committee.

2.10. Categories of Offences and Punishment

The following are the categories of examination malpractice and leakage offences, as well as the appropriate punishment for the offences.

A. Category of Offences Punishable by Expulsion from the university.

- i. Impersonating another student, or being impersonated by another person at an examination.
- ii. Exchanging names and/or numbers on answer scripts/sheets.
- iii. Introduction and use of relevant unauthorized material(s) into the examination hall.
- iv. Exchange of materials (such as question papers, examination cards) containing jottings that are relevant to the on-going examination in the examination hall.
- v. Theft and/or illegal removal of examination scripts.
- vi. Any kind of mischief likely to hinder the smooth conduct of the examination. For example, causing fire, flooding or engaging in physical violence.
- vii. Collaborating with, or copying from, another candidate.
- viii. Cheating outside the examination hall, such as in toilets, hall of residence etc.
- ix. An offence that falls under category B committed by a student who was previously rusticated.
- x. Using mobile phones and other ICT devices to access voice or text messages, documents, materials from the internet, etc, during examinations.
- xi. Any offence under this category committed by a student of this University in another institution.
- xii. Destruction of, tampering with, evidence by candidates – including preventing access to electronic devices.
- xiii. Any other misconduct deemed by the Senate Committee on Examination Misconduct and Senate to warrant expulsion.

B. Category of Offences Punishable by Rustication

- i. Facilitating/Abetting/Aiding cheating by another candidate.
- ii. Introduction, but not use, of relevant unauthorized materials to the examination hall.
- iii. Using mobile phones and other ICT devices in the examination hall for things unrelated to the on-going examination.
- iv. Acts of misconduct (such as speaking/conversation) during the examination that is likely to disrupt the conduct of the examination.
- v. An offence in category C committed by a previously warned or rusticated student.
- vi. Any offence under this University in another institution.
- vii. Any other misconduct deemed by the Senate Committee on Examination Misconduct and Senate to warrant rustication.

C. Category of Offences Punishable by Written Warning

- i. Introduction of unauthorized irrelevant materials into the examination hall.
- ii. Writing on the question paper
- iii. Failure to switch off mobile phones and other ICT devices, and/or failure to keep them out of sight.

- iv. Any offence under this category committed by a student of this University in another institution.
- v. Any other misconduct deemed by the Senate Committee on Examination Misconduct and Senate to warrant warning.

2.11. Mentoring

Mentoring is in comparison to coaching and tutoring. Students (mentees) will be assigned to a mentor approved by the college/department. The mentee shall be supported in his/her professional/academic and personal development such as giving practical concrete advice; introducing the mentee to existing networks; imparting informal rules and providing long-term support. Mentee introduces himself/herself to the mentor, and formulates his/her medium- and longer-term professional and personal goals. An Ideal Mentee should be: Respectful, Committed, Passionate and Ethical.

SECTION THREE

3.1. LIST OF COURSES

LEVEL 100		
FIRST SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
MTH 1305	Mathematics for Health Sciences	3
BIO 1201	General Biology I (Zoology I)	2
BIO 1203	General Biology III (Botany I)	2
PHY 1210	Mechanics	2
PHY 1220	Electricity and Magnetism	2
PHY 1170	Physics Practical I	1
CHM 1231	Inorganic Chemistry	2
CHM 1241	Organic Chemistry	2
GSP 1201	Use of English	2
	TOTAL	18
SECOND SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
MTH 1312	Introductory Statistics for Health Sciences	3
PHY 1230	Behaviour of Matter	2
PHY 1180	Physics Practical II	1
BIO 1202	General Biology II (Zoology II)	2
BIO 1204	General Biology IV (Botany II)	2
CHM 1251	Physical Chemistry	2
CHM 1261	Practical Chemistry	2
GSP 1202	Use of Library, Study Skills & ICTs	2
	TOTAL	16
LEVEL 200		
FIRST SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PYS 2101	General Principles and Cell Physiology	1
PYS 2102	Blood & Body Fluids	1
PYS 2221	Gastrointestinal Tract I	2
PYS 2231	Endocrinology I	2

ANA 2142	Histology I	1
ANA 2311	Gross Anatomy I (Musculoskeletal System, Upper & Lower Limbs)	3
ANA 2123	Embryology I	1
PSY 2101	Medical Psychology	1
BCH 2211	General Biochemistry I	2
BCH 2112	Nutritional Biochemistry I (Inorganic Biochemistry & Vitamins)	1
BCH 2113	Bioenergetics and Enzymology	1
BCH 2137	Biochemistry Practical I	1
GSP 2206	Peace Studies & Conflict Resolutions	2
GSP 2201	Use of English (For Direct Entry Students Only)	2*
	TOTAL	19
	(Direct Entry Level Students only)* TOTAL	21
SECOND SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
BCH 2107	Biochemistry Practical II	1
BCH 2115	Nutritional Biochemistry II	1
BCH 2116	Biochemical Endocrinology	1
BCH 2214	General Biochemistry II	2
ANA 2362	Gross Anatomy II (Thorax, Abdomen, Pelvis & Perineum)	3
ANA 2143	Histology II	1
ANA 2124	Embryology II	1
PYS 2212	Cardiovascular System I	2
PYS 2222	Gastrointestinal Tract II	2
PYS 2232	Endocrinology II	2
PYS 2242	Neurophysiology I (Excitable Tissue & Autonomic Nervous System)	2
PHY 2301	Electrophysics	3
GSP 2204	Foundation of Nigerian Culture, Government and Economy	2
GSP 2205	Logic and Philosophy	2
GSP 2202	Use of Library Study Skills & ICT (For Direct Entry Students Only)	2*
	TOTAL	25
	(Direct Entry Level Students only)*TOTAL	27
LEVEL 300		
FIRST SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
ANA 3212	Head, Neck & Special Senses	2
ANA 3213	Neuroanatomy	2
PYS 3203	Physiology of Respiration	2
PYS 3211	Cardiovascular System II	2
PYS 3221	Renal System	2
PYS 3143	Neurophysiology II	1
PYS 3232	Reproductive Physiology	2
SOC 3101	Medical Sociology	1
	TOTAL	14
SECOND SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PTY 3201	Introduction to Physiotherapy	2

PTY 3202	Introduction to Medical Rehabilitation	2
PTY 3203	Basics of Exercise Therapy	2
PTY 3204	Electrotherapy I (Actinotherapy, Other Radiations & Conductive Heating)	2
PTY 3205	Therapeutic Massage	2
PTY 3306	Kinesiology	3
PTY 3407	General Nursing Procedure	4
PTY 3408	Hydrotherapy & Cryotherapy	4
EEP 3201	Entrepreneurship & Innovation	2
	TOTAL	23
LEVEL 400		
FIRST SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PTY 4201	Electrotherapy II (High Frequency Currents & Laser Therapy)	2
PTY 4202	Techniques of Exercise Therapy	2
PTY 4304	Pathokinesiology	3
PTY 4206	Introduction to Pharmacology	2
PTY 4207	Introduction to Pathology	2
PTY 4208	Orthopedics & Rheumatology	2
PTY 4209	Exercise Prescription	2
PTY 4210	Physiotherapy in General Surgery	2
PTY 4211	Research Methodology	2
PTY 4213	Cardiopulmonary & Metabolic Disorders	2
EEP 4201	Venture Creation & Growth	2
	TOTAL	23
SECOND SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PTY 4203	Manipulative Therapy (Spinal Therapy)	2
PTY 4205	Statistical Techniques	2
PTY 4412	Prosthetics & Orthotics	4
PTY 4214	Exercise in Health & Disease	2
PTY 4215	Electrotherapy III - Direct & Low-Frequency Currents	2
PTY 4216	Pathology	2
PTY 4217	Pharmacology	2
PTY 4618	Clinical Physiotherapy 1	6
PTY 4219	Neurology	2
PTY 4320	Computer Applications in Physiotherapy & Medicine	3
	TOTAL	27
LEVEL 500		
FIRST SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PTY 5201	Geriatrics	2
PTY 5202	Obstetrics & Gynaecology	2
PTY 5203	Neurophysiological Basis of Therapeutic Exercise	2
PTY 5304	Pediatric Physiotherapy	3

PTY 5305	Community Physiotherapy & Ergonomics	3
PTY 5206	Nutrition in Health & Disease	2
PTY 5208	Dermatology	2
	TOTAL	16
SECOND SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PTY 5607	Research Project	6
PTY 5309	Introduction to Speech Therapy	3
PTY 5310	Introduction to Occupational Therapy	3
PTY 5311	Physiotherapy Administration & Management	3
PTY 5213	Medical Diagnosis	2
PTY 5614	Clinical Physiotherapy II	6
PTY 5215	Soft Tissue Disorders & Sports Injuries	2
	TOTAL	25

3.2. CREDIT HOUR DISTRIBUTION

Credit hour distribution is as follows:

- i) **THEORY:** One credit unit shall equal to one hour of teaching per week throughout the semester
- ii) **CLINICAL:** One credit unit shall equal to four hours of clinical posting per week throughout the semester

SECTION FOUR COURSE DESCRIPTION

LEVEL 100

FIRST SEMESTER

MTH 1301: ELEMENTARY MATHEMATICS I (ALGEBRA AND TRIGONOMETRY)

Elementary set theory: subsets, union, intersection, complements, Venn diagram, Real numbers, Integers, Rational and irrational numbers, Real sequences and series, Theory of quadratic equations, Binomial theorem, Circular measure, Trigonometric functions of angles of any magnitude, trigonometric formulae.

BIO 1201: GENERAL BIOLOGY I (ZOOLOGY I)

Animal cell structure and organization; functions of the cellular organelles, Diversity, characteristics and classification of animals, Animal reproduction and interrelationship.

BIO 1203: GENERAL BIOLOGY III (BOTANY I)

Plant cell structure and organization: functions of plant cell organelles, Diversity, characteristics and classification of plants. Plant reproduction; heredity and evolution; elements of ecology and types of habitats.

PHY 1210: MECHANICS

Space and time, frames of reference, units and dimension, kinematics; Fundamental laws of mechanics, statics and dynamics; Galilean invariance; universal gravitation; Work and energy; Rotational dynamics and angular moments conservation laws

PHY 1220: ELECTRICITY AND MAGNETISM

Electrostatics; Conductors and currents; Dielectrics; Magnetic fields and induction; Maxwell's equations; Electromagnetic oscillations and waves and their applications.

PHY 1170: PHYSICS PRACTICAL I

This introductory course emphasizes quantitative measurements, the treatment of measurement errors, and graphical analysis. A variety of experimental techniques will be employed. The experiments include studies of matters, the oscilloscope, mechanical systems, electrical and mechanical resonant systems, light, viscosity, etc, covered in the above physics course.

CHM 1231: INORGANIC CHEMISTRY

Principles of atomic structure, isotopes, empirical and molecular formulae. Electronic configuration, periodicity and building up of the periodic table. Hybridization and shapes of simple molecules, Extraction of metals. Comparative chemistry of Group IA and IVA elements. Preparation, properties, structure and application of some selected compounds. Introduction of Transition metal chemistry and nuclear chemistry.

CHM 1241: ORGANIC CHEMISTRY

Historical survey of the development and importance of organic chemistry. IUPAC Nomenclature and classification of organic compounds, Homologous series, Covalent bonds and hybridization to reflect the tetravalency of carbon in organic compounds, electronic theory in organic chemistry. Qualitative and quantitative organic chemistry; Determination of empirical and molecular formulae; simple techniques of writing structural formulae; Isolation and purification of organic compounds; Saturated hydrocarbons; structural isomerism; Properties and reactions of alkanes and cycloalkanes, mention of their chemistry and uses in petroleum; Unsaturated hydrocarbons; alkenes, alkynes, cycloalkanes: cis-trans isomerism; simple electrophilic addition reactions; Polymerization.

GSP 1201: USE OF ENGLISH

Vocabulary Development: This module essentially focuses on the need for and ways of developing vocabularies; vocabularies are essential ingredients for spoken and written communication. This can be developed through reading of different texts. Items to be discussed under this module include the following: Denotation and Connotation, Registers/Jargons, Phrasal Verbs, and Idioms. **Basic Grammar:** This module discusses the basic components of grammar and these include: Parts of speech, Tenses, Punctuation, Sentences, Structure and Function. **Reading Comprehension:** This module basically tests students' capacity to comprehend reading materials. Reading materials should be relevant to the students' discipline and should test their ability to identify specialized registers and search for basic information in a passage. **Written communication:** This module discusses forms of written communication. Attention should be placed on the importance of written communication for studies and life as a working class. The module should revisit basic parts and structures of correspondences such as letters, memos, circulars, reports, etc and essays. It is important that beside discussions, students are provided with relevant samples of these in books and newspapers. **Spoken English:** This module discusses the foundation of the spoken English. The module is critical to students because it aids their ability to acquire proficiency in spoken English and to communicate effectively and efficiently. The module handles the following: Vowels, Consonants and Symbols; Minimal Pairs, Consonant Contrast, Clusters; Interference in Speech; Stress and Intonation. **Summary:** This module essentially focuses on how to summarize a text, or precise, extracting relevant information from a whole text without losing the central meaning of the text. Here students should work with texts/passages relevant to their discipline or field of study. **Language and style:** This module introduces students to appreciate literature and language of literature or literary language. Extracts of literary texts such as prose, poetry and drama will be provided. The texts will focus attention on figures of speech, style, theme, suspense, dialogue, setting and plot.

SECOND SEMESTER**MTH 1303: ELEMENTARY MATHEMATICS III (CALCULUS I)**

Function of a real variable, graphs, limits and idea of continuity. The derivative, as limit of rate of change: Integration as an inverse of differentiation: methods of integration, definite integrals; application areas, and volumes.

PHY 1230: BEHAVIOUR OF MATTER

Molecular treatment of properties of matter, elasticity: Hook's law; Young's shear and bulk model; Hydrostatics; streamlines, Bernoulli and continuity equations, Turbulence, Reynold's number. Viscosity; Laminar flow, Poiseuille's equation. Surface tension; adhesion, cohesion, capillarity, drops and bubbles; Temperature; the Zeroth law of thermodynamics; heat; gas laws of thermodynamics; Kinetic theory of gases Applications.

PHY 1180: PHYSICS PRACTICAL II

This introductory course emphasizes quantitative measurements, the treatment of measurement errors, and graphical analysis. A variety of experimental techniques will be employed. The experiments include studies of matters, the oscilloscope, mechanical systems, electrical and mechanical resonant systems, light, viscosity, etc, covered in the above physics course.

BIO 1202: GENERAL BIOLOGY II (ZOOLOGY II)

A generalized survey of the animal kingdom based mainly on study of similarities and differences in their external features with examples from Platyhelminthes, Annelids, Arthropods, Fishes, Amphibians, Reptiles, Birds and Mammals.

BIO 1204: GENERAL BIOLOGY IV (BOTANY II)

A generalized survey of the plant kingdom based mainly on study of similarities and differences in their external features with examples from viruses, bacteria, protozoa, algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms.

CHM 1251: PHYSICAL CHEMISTRY

Principles of atomic structure, isotopes, empirical and molecular formula; nuclear structure, atomic fission and nuclear energy. The electronic structure and arrangement of electrons in atoms; Electronic configuration of 1st and 2nd rows of elements. Properties of gases: equation of state, kinetic and molecular theory of gases, and heat capacities of a gas. Equilibrium and thermodynamics; Thermo chemistry, Enthalpy of reactions, bond energies, thermodynamic cycles, Hess' law, Born Haber cycle, the meaning of K_a , K_p and K_c , Le Chatelier's principle, pH , ionic equilibrium, buffers, indicators, solubility product, common ion effect, redox reactions. Electrode potentials, electrolytes and electrolysis. Kinetics: The Position of equilibrium and the rate at which it is attained Factors influencing the rate of reactions. Introduction of activation and catalysis

CHM 1261: PRACTICAL CHEMISTRY

Laboratory instructions and experimental products shall be conducted for the candidates from the following subject areas: **Physical:** Determination of heats of reaction, effect of solutes on boiling points of solvents, partition coefficient. Determination of molecular mass by Dumas and Victor Meyer methods. Measurements of rate equation and activation energy. Other experiments based on the scope of the lectures and as approved by the Department. **Organic:** Safety precaution instructions, classification of organic compounds by their solubilities in common solvents. Qualitative analysis for common elements in organic compounds identification and classification of acids and bases functional groups. Identification of the following: neutral functional groups, alcohols, aldehydes, ketones, esters, anhydrides and others. Acetylation of aniline as an example of the preparation of solid aniline derivative. An electrophilic addition reaction. **Inorganic:** Qualitative and quantitative analysis; molarity, concentration and percentage purity.

GSP 1202: USE OF LIBRARY, STUDY SKILLS AND ICT

Nature, concepts and historical development of Libraries; types of libraries and information centers. Types of Information resources: Print and Electronic resources; Methods of information Organization and Retrieval: Classification and Cataloguing. Copyright and Censorship of Materials in the Libraries; Database and Web Resources Management; Internet Application to Library and Information Centers. Citation and reference Techniques used for Academic Writing. The Listening Process, Barriers to Effective Listening and Note-Taking. The Writing process; Outline and composition of various Texts; Oral Skills; the Reading Process; Reading strategies and Speed Reading. Use of the dictionary; Research Skills with Particular Emphasis on Common

Problem Areas such as Plagiarism, Citations and Referencing; Group Discussions and Co-Curricular Activities. What is ICT? The components of ICT(Technologies for the collection, Storage, Analysis, Transfer and Dissemination of information; ICT devices (Computers, Telecommunications Equipment and Devices, including Phones, Dissemination Equipment and devices, including Radios, TVs, Storage Devices, Devices and equipment Used for Educational Purposes). What is a computer? The components of a computer(CPU, Memory, Storage, input and output devices); Software (System software and Applications software); Practical working knowledge of common Applications Such as MS Windows (Operating System), MS Word (Word Processing), MS Excel (Spread-Sheets Analysis) and MS Power Point (Marking Presentations). Computer Applications in society (Education, Government, Business, Home); what is the internet? Important internet Applications/Services (e-Mail, World Wide Web, Discussion Groups, Online Social Networks); Practical working Knowledge of the World Wide Web (Use of Search Engines, Use of Online Social/Academic Networks for Educational Purposes, Web Research, Online Educational Services/Applications); The Future of the Internet for Educational Purposes.

LEVEL 200

FIRST SEMESTER

PYS 2101: GENERAL PRINCIPLES AND CELL PHYSIOLOGY

A brief overview of different fields of physiology and their inter-relationship with other fields of science, Physiology as the study of life, Uniqueness of Human physiology-Success of human species as the result of the uniqueness, Physiology of adaptation, Physiology and homeostasis, Regulation of body functions, Control system of the body: Negative feedback mechanism, positive feedback mechanism, Adaptive feedback mechanism. Anatomicity of the body, Cell organelles – forms and functions, Transport across the cell membrane – active and passive transport

PYS 2102: BLOOD AND BODY FLUIDS

Blood and blood vessels: Arteries, arterioles, vein, venules, capillaries, Interstitial fluids (IF) and vessels through which they flow. Lymph and lymph vessels, Cerebrospinal fluid and its vessels

PYS 2221: GASTROINTESTINAL TRACT I

Introduction to GIT: Functions of GIT. Methods of studying the functions and structure of the G.I.T: Layers, Neural and Humoral Control Autonomic innervation of the G.I.T. Sympathetic and parasympathetic. Gastro-intestinal reflexes, Functional types of movements in the G.I.T: Propulsive and mixing. Hormonal control of G.I.T. Motility. Oral Cavity: Mastication. Salivary glands. Functions of Saliva, Salivary reflexes. Inhibition of salivary secretion. Physio-anatomical consideration of the stomach: Functions of the stomach. Mixing and propulsion of food in the stomach. Regulation of gastric motility. Gastric Secretion: Composition, properties and functions of gastric juice. Effects of Nutrient patterns on gastric secretion. Regulation of gastric secretion Stomach (gastric) emptying. Vomiting: Composition, properties and functions of pancreatic juice. Effects and factors, which modify it Nervous influences, Humoral factors, Biological rhythms, Sex, Age & posture Indices of Cardiac Activity: Stroke (Systolic volume Cardiac Output, Heart work, Venous return.

Physiologic anatomy of the lungs, Lung volumes, Breathing, Gas exchange, Acid base of Nutrient composition on pancreatic secretion. Functions of the liver, Composition, properties and functions of bile ejection. Regulation of production and secretion of bile by the liver. Mechanism of gall bladder emptying. Gall stones. Intestinal glands-villi and microvilli. Types of intestinal digestion Uniqueness of intestinal secretion of enzymes small intestine motility control of small intestine motility – Genic, neural, hormonal small intestine reflexes. Intestino-intestinal and anointestinal inhibitory reflexes; gastro-intestinal reflex.

PYS 2231: ENDOCRINOLOGY I

Introduction: methods of studying Endocrine Glands, local and general hormones, chemical nature of Hormones, formation, storage and mechanism of action of hormones, endocrine disorders.**Pituitary gland:** functional anatomy including histology functions, mechanism of action, regulation and abnormalities of anterior pituitary hormones, posterior pituitary hormones functions, mechanism of action regulation and abnormalities. **Thyroid gland:** functional anatomy, hormones of the thyroid gland metabolism, mechanism of action, effects of

body metabolism and abnormalities. **Parathyroid glands:** functional anatomy, parathyroid hormones; synthesis, storage, functions, mechanism of action and abnormalities, regulation of blood calcium concentration.

ANA 2142: HISTOLOGY I

Methods of Histology and Cytology, Direct observation of living tissues and cell. Examination of killed tissue. Differential centrifugation. Histochemical Methods. Principles of Microscopic Analysis, X-ray Diffraction. The cell-nucleus, Cytoplasmic Organelles, cell membrane, chemical composition of protoplasm, macromolecules etc. Cell Division-Mitosis, Meiosis, Factors affecting cell division. Epithelium-Classification, Structural Features, Specialisation, Function Blood-formed elements of blood, Blood cell formation, Destruction of blood cells. The bone marrow. Connective Tissue proper – Extracellular, components, cellular elements chemistry, functions and classification. Histological features-Histogenesis and histophysiology. Cartilage-Types, Classification, Chemistry, Regeneration, Regressive change in Cartilage, Histophysiology. The Bone classification, Chemistry, development etc. Muscular Tissue, Types of muscle, Chemistry, Molecular basis of Muscular contraction, Histogenesis and regeneration of muscular Tissues. The Nervous Tissue. The nervous – structure, types and distribution. Peripheral nerve endings, Neuroglia, synapse and the relationships of nervous system, Development of Nervous system.

ANA 2311: GROSS ANATOMY I (MUSCLOSKELETAL SYSTEM, UPPER AND LOWER LIMB)

The pectoral girdle and associated joints (Sternoclavicular, acromioclavicular). Muscles acting on the shoulder joint, the axilla and Brachial Plexus. The Anatomy of the Breast, Blood supply. Venous drainage and lymph drainage. Flexor and Extensor-Compartments of arm, the elbow joint, and muscle acting on it. The flexor and extensor compartment of the fore-arm, Wrist Joint, and muscles acting on it. The anatomy of the hand, the blood supply and anastomosis of the upper limb (around scapula, humerus, elbow and hand), and Dermatomes of the upper limb. Posture and Locomotion in Man. The lower limb Introduction, Lymphatic and venous Drainage, Blood supply of lower limb. The thigh-anterior, medial, posterior compartment, clinical aspects, drainage of limbs. The thigh – posterior compartment, popliteal fossa. The hip joint. Leg-Anterior, Lateral, Posterior compartment. Dorsum of foot, knee joint and muscles acting on it. Inversion and Eversion. Ankle joint, muscles acting on it. Dermatomes of the lower limb.

ANA 2123: EMBRYOLOGY I

Oogenesis and Ovulation – Mitotic changes in Oocytes, formation and function of the Zonapellucida, Follicular growth, Pre-ovulatory menstruation Ovulation free of Follicle post-ovulation Atresia, Spermatogenesis and the spermatozoa, Testis, before and at Puberty seminiferous epithelium. The spermatozoa, spermatogenic cycles and time rotations in spermatogenesis, Cycles and seasons- puberty, Oestrous and menstrual cycles, Ovulation, Pseudopregnancy and pregnancy, Delays of reproduction, Fertilization – Egg and sperm transport, Capacitation. Acrosome reaction and sperm penetration. Immediate response to sperm penetration, prenuclear development and syngamy, Errors of fertilizations, Fertilization in-vitro, Pre-Embryonic period-Cleavage, Embryonic cell differentiation, Foetal membranes, Implantation and formation of placenta at birth.

PSY 2101: MEDICAL PSYCHOLOGY

An elementary introduction to psycho-biological basis of behaviour. Topics to be covered include; basic units of the nervous system, hierarchical structure of the brain, sensory process, consciousness and visual sensation, auditory and chemical fundamental of motivation. Emphasis will be on the common types, causes, diagnostic characteristics and treatment of mental disorders observable in the Nigerian and other cultures. Minor and serious types. Theories of learning, human perception, Lifespan Development: Factors that influence on physical development, environmental, cultural and biological factors, Physical development – infants, childhood, adolescence, adulthood, old age, Piaget's Stage Model, The zone of proximal development. Cognitive development in adolescence (egocentrism) and adulthood (intellectual changes in adulthood, the role of wisdom), Cognitive impairment in old age

BCH 2211: GENERAL BIOCHEMISTRY I

Cell Biology: Cell – Introduction, Cell structure, Cell membrane structure and function, various types of absorption. Intracellular organelles and their functions, briefly on cytoskeleton. **Ph. and Buffers.** Sodium, Potassium and their importance in body. Balance & imbalance of Water, Electrolytes. Acid – Base Balance and

imbalance. Acids, Bases and buffers, pH. Buffer systems of the body, bicarbonate buffer system. Role of lungs and kidneys in acid base balance, Acid base imbalance. **Carbohydrate Chemistry.** Definition, Classification (with proper examples) and their functions. General characteristics of digestion and absorption of carbohydrates. **Amino Acids Chemistry.** Definition, Various ways of classification(with proper examples), amino acids, peptides, proteins and their biochemical importance, Denaturation, isoelectric pH and its significance. **Lipid Chemistry.** Definition, Classification (with proper examples) and functions of Lipids and fatty acids. Biochemical aspects of digestion and absorption of lipids. Cholesterol and its importance. Classification and functions of Lipoproteins **Nucleic Acids Chemistry.** Definition, Structure & functions of DNA, RNA, Nucleotides & their biological importance.

BCH 2112: NUTRITIONAL BIOCHEMISTRY I (INORGANIC BIOCHEMISTRY AND VITAMINS)

Calcium & Phosphorus, Chloride, Copper & Iodine, Iron, Manganese, Selenium, Zinc & Fluoride Classification, sources, functions and RDA of fat soluble and water soluble vitamins. Active forms and metabolic role, deficiency manifestations. Co-enzymes forms of vitamin B-complex group, Hypervitaminosis.

BCH 2113: BIOENERGETICS AND ENZYMOLOGY

Intracellular localization of enzymes. Properties of enzymes. Enzyme kinetic and inhibition; co-enzymes and cofactors. Glycolysis, tricarboxylic acid cycle. Oxidative phosphorylation and hexose monophosphate shunt. Membranes and transport glycogen synthesis and breakdown. Oxidative deamination, transamination and urea cycle. Degradation of amino acid. Syntheses of fatty acids, oxidation of fatty acids. DNA replication and transcription; protein biosynthesis and regulation. Cholesterol: chemistry, synthesis and breakdown. Biochemical basis of hormone action. Drug metabolism. Mineral metabolism and role of calcium formation.

BCH 2137: BIOCHEMISTRY PRACTICAL I

Serum glucose estimation, determination of serum urea, electrolytes and creatinin. Serum uric acid determination. Bilirubin and serum liver enzyme determination. Quantitative serum protein determination.

GSP 2206: PEACE STUDIES AND CONFLICT RESOLUTIONS

Basic Concepts and Terms in Peace Studies and Conflicts Resolution. Theories of Peace and Conflict Resolution. The Dynamics, role and resolution of conflict in African societies: Analysing various perspectives. Conflict management- Alternative Dispute resolution: The meaning of conflict, and Alternative dispute resolution techniques. Treating escalating problems (Crisis management), Hints for effective conflict resolution. Conflicts. Roles of NGOs in conflict resolution: Theoretical overview of conflict, factors that lead to conflict, consequences of conflict, Handling or managing conflict, the roles of NGOs in conflict management/resolution. The GACACA: Achieving Peace and reconciliation the African way. Background to GACACA, characteristics of the GACACA, solving GACACA, Organisation of the modern GACACA. Women and youth in peace building: The case of MANO RIVER BASIN PEACE INITIATIVE, conceptual frame work, peace and peace building, West African Youth Network(WAYN) and their role in peace initiative, the role of women and youth, peace keeping operations in the African Sub-region: ECOWAS/ECOMOG, SADC and IGAD, peace process in Sudan, use of case studies. Conflict and peace reporting in Africa Appraisal and evaluation of peace and conflict resolution in Africa by media. Conflict and conflict resolution in Nigeria proposing the cultural relativistic approach, cases of conflict in Africa. Unity, Development and cooperation as analytical tools: From peace to war, Peace and Unity, Peace as Vehicle for Development and Cooperation.

GSP 2201: USE OF ENGLISH (FOR DIRECT ENTRY STUDENTS ONLY)

Same course description as GSP 1201 above.

SECOND SEMESTER

BCH 2107: BIOCHEMISTRY PRACTICAL II

General reaction of carbohydrates, reaction and estimation of serum lipids, determination of serum ascorbic acid, chemical composition of blood.

BCH 2115: NUTRITIONAL BIOCHEMISTRY II

Importance of nutrition. Calorimetry. Respiratory quotient and its significance. Energy requirements with reference to age and sex. Thermogenesis, Specific dynamic action. Balance diet for normal adult and role of fibers in diet. Nitrogen balance and its significance. Protein energy malnutrition (Kwashiorkor & Marasmus).

BCH 2116: BIOCHEMICAL ENDOCRINOLOGY

Definition, Classification and Mechanism of hormone action.

BCH 2214: GENERAL BIOCHEMISTRY II

Carbohydrate Metabolism: Glycolysis (Aerobic and Anaerobic). TCA cycle and their energetics. Synthesis and break down of glycogen and its regulation biochemical importance. Biochemical aspects of digestion and absorption of carbohydrates. Significance of HMP shunt and Gluconeogenesis. Hormonal regulation of blood sugar, Diabetes mellitus. Metabolic disorders of Glycogen metabolism, Lactose intolerance. **Amino Acid and Protein Metabolism:** Fate of amino acids in the body (deamination, transamination, transmethylation), fates of ammonia and urea cycle. Biochemical aspects of digestion and absorption of proteins. **Lipid Metabolism:** Beta oxidation of fatty acids and its energetic, ketogenesis, ketolysis & ketosis. **Nucleic Acid Metabolism:** Synthesis and degradation of purines, pyrimidines and related disorders. Some aspect of nucleic acid digestion.

ANA 2362: GROSS ANATOMY II (THORAX, ABDOMEN, PELVIS & PERINEUM)

Shape and frame-work of the thorax. Surface Anatomy: The lungs, Apertures of the Thorax, Respiratory movements, Superficial Structure (the muscles), Intercoastal arteries and veins, Internal thoracic artery, Mediasternum (superior and inferior) middle, anterior and posterior), Lateral parts and pleurals, Roots of the lungs, lobes of the lungs, Intrapulmonary structure, The trachea, sternocostal, surface of the heart, Surface anatomy of the heart. Chambers of the heart, structure of walls of heart – Myocardium and conducting system. The aorta Oesophagus, Thoracic duct, Sternal joints, Sterncostal joints, Interchondral joints Costochondral joints, Costovertebral joints, Joints and Ligaments of the Vertebral column, anterior and posterior Abdominal walls, Peritoneum, Stomach, small & Large Intestine, Liver, Spleen, Pancreas, Kidneys & Suprarenal Glands, Bones and Joints of Pelvis, Pelvis and Perineum, Anatomy of male and female reproductive systems, Superficial/Deep perineal pouches.

ANA 2143: HISTOLOGY II

Blood vascular system, fine structure of capillary wall, arteries, veins. The heart: Histogenesis of blood vessels and heart, impulse conducting system, lymphatic system vessels. Organs – lymph nodes, function, histogenesis and regeneration. The spleen – Histological organization functions, histogenesis and regeneration, The thymus- Histological organization functions, involution of thymus, Mammary Gland, Resting and Active Functions- endocrine control, regression and involution of mammary gland, Histogenesis, Skin, Endocrine system, Reproductive system (Male & Female), Urinary system, GIT.

ANA 2124: EMBRYOLOGY II

Embryogenesis- Differentiation of the embryonic area formation of primary axial structure, Differentiation of the intraembryonic mesoderm, Germ layers and derivatives, The embryo – The limbs, outline of development of the Nervous System, Early development of the Alimentary canal, the face, separation of the Nose and Mouth, Differentiation of Mid-gut and Hind-gut, Blood Vascular-System: Development of blood corpuscles, formation of primitive blood vessels. Coelom and Diaphragm. Congenital malformations.

PYS 2212: CARDIOVASCULAR SYSTEM I

Systemic or greater circulation, pulmonary or lesser circulation. The Heart, Chambers, Capacity, Heart walls: Epicardium, Myocardium, Endocardium and pericardium. Heart valves: atrioventricular and semilunar, Cardiac cycle and phases: systolic (contract) and diastolic (relaxation) Mechanism of valve functioning physiological properties of cardiac muscle. The basis of heart Automaticity (a) Sinoatrial node (paced maker) (b) Atrioventricular node (c) The Bundle of Hiss, Stanius experiment Heart Block, fibrillation, Refractory period of the cardiac muscle: Extra systole External manifestations of cardiac Activity: Apex beat, Heart Sounds, Bioelectrical activity of the heart and its recording: standard leads (ECG) chest leads, Control of cardiac Activity Nervous control, Reflex control: Intracardiac reflex responses – Reflex effects of the pericardium, reflex effects of the coronary pulmonary, atria and ventricular vessels, Effects of vascular reflexogenic zones, Reflex effects of visceral receptors. Effects of the cerebral cortex on cardiac Activity. Humoral control of Cardiac Activity, effects

of electrolytes: K^+ & Ca^{2+} ions, effects of neurotransmitters, effects of hormones: Thyroxine, insulin, Gonadal hormones, Adrenaline and nor adrenaline. Heart Rate balance, Adaptation to abnormal environments, metabolic rate and temperature regulation.

PYS 2222: GASTROINTESTINAL TRACT II

Large intestine and Rectum, Colonic mortality. Defecation. Control of colonic and rectal motility-myogenic and neural control Physiology of absorption: Mechanism of absorption. Absorption in the mouth. Stomach small and large intestines (Note: absorption of CHO, proteins, fats, water, Na^+ , K^+ , P^+ , Cl^- , HCO_3^- etc) Location and functions of the Alimentary centre: Sensations of satiation, hunger and thirst; appetite physiology of Gastrointestinal disorders: Appendicitis, Diarrhoea, constipation cancerous tumours eating disorders peptic ulcer Jaundice. The Kidneys, Functions of the kidneys, Excretion of Metabolic wastes, products and foreign chemicals, Regulation of water and electrolyte balances. Regulation of body fluid osmolality and electrolyte concentrations. Regulation of acid base balance, Regulation of arterial blood pressure. Secretion, metabolism and excretion of hormones Gluconeogenesis.

PYS 2232: ENDOCRINOLOGY II

Pancreas: functional anatomy, insulin; chemistry, synthesis, storage, release, mechanism of action and control of secretion of insulin, Glucagon; synthesis, storage, release, mechanism of action and control of secretion of glucagon. Somatostatin and gastrin, Diabetes mellitus, Glucose tolerance test. **Adrenal cortex:** functional anatomy and hormones, synthesis, chemistry, synthesis, functions. Regulation, mechanism of action of adrenal cortical hormones and aldestrone. **Adrenal medulla:** functional anatomy, synthesis, storage, release and action of catecholamines and adrenalin

PYS 2242: NEUROPHYSIOLOGY I (EXCITABLE TISSUE AND AUTONOMIC NERVOUS SYSTEM)

Excitation, Action potential, Development of Resting membrane potential, Action potential in Skeletal, cardiac and smooth muscles, Characteristics of Excitable tissues, Propagation of Action potential in Nerve tissue, Nerve cell: Morphology of a nerve cell, Types of nerve fibers, Propagation of action potential in different types of nerves, salutatory and neighbourhood conductions, Synaptic Transmission of Impulse: Morphology of synapses, Types of synapses, Transmission of impulses at a synaptic junction, Applied physiology, Neuromuscular Transmission: Morphology of a Neuromuscular junction Transmission of impulses at neuromuscular junction, Applied physiology: - myasthenia gravis. Muscles: Morphology of cardiac, smooth and skeletal muscles. Molecular basis of muscle contraction: Structure and function of contractile proteins, Structure and function of Regulatory proteins, Mechanism of muscle contraction, Excitation and coupling in muscle contraction. Applied Physiology of Muscle contraction. Autonomic Nervous System (ANS) General description of ANS, Basic Physiology of ANS and homeostasis. Physiology and Pharmacology of ANS, Applied Physiology of ANS Physiologic Anatomy of the respiratory tract, Pulmonary capacities and volume, pulmonary ventilation, Gaseous Exchange and gas transport, Oxyhaemoglobin. Haemoglobin structure and function, oxyhaemoglobin curve and factors affecting respiration and homeostasis, Role of respiration in acid-acid-base balance, control and regulation of respiration, Nervous and chemical controls. Respiratory insufficiency: Hypoxia. Abnormalities of respiration and specific peculiarities of respiratory diseases.

PHY 2301: ELECTROPHYSICS

Structure and properties of matter; energy-its definition, types and transformation, Static electricity, condensers; Electrolysis; conductor-insulator and theory of semiconductors. Electromagnetic induction and its applications (Faradays law, Amperes law, D.C and A.C generators, inductors and transformers). AC rectification and regulation; Regulation of induced current, Measurement of current, moving-coil galvanometer, milliampere meter, voltmeter; Distribution of electrical energy, thermal energy, transmission of heat by Conduction, Convection, and Radiation. Electromagnetic waves, Radiant energy, Grothus law, Cosine law, Inverse square law; Sonic law and properties of sound waves; Nature effects and principles of production of different current, muscle stimulating currents, Modification of currents, Reverse interrupt; Surge mechanical, Manual electronic multivibrator circuit; High field current (HFC) One basic circuit; Alternative methods of regulating current; Infra-red rays; luminous and non-luminous generators and their spectra. Essential components and spectra of air, water cold vapour and fluorescent tube lamps ultra sound waves.

GSP2204: FOUNDATION OF NIGERIAN CULTURE, GOVERNMENT AND ECONOMY

Introduction and concepts of culture: An overview of culture, definition and importance of culture, types of culture in Nigerian Society, major ethnic groups in Nigeria. **People of Nigeria and their culture in the pre and postcolonial eras:** Nigerian culture pre and post colonial eras, social and political organisations of major ethnic groups in Nigeria, the dynamics and evolution of Nigerian culture. **The Heritage of the Past:** political systems, emergence of states and their administration, women in societies, manufacture and crafts (Brass, Bronze, Ivory, Glass, Silver works, Sculpture, Weaving and Leather Industries). **Nigerian Political System in Pre and Post colonial Eras:** An overview of Colonial Administration, Nigeria Nationalism (1945-1960), politics during post colonial period (First Republic, Military Regimes and Return of Democracy). **Ethics and Nigeria Legal system:** Definition of ethics, Ethical issues in Nigeria, the concept of legal system, an overview of Nigerian legal system (Sources of Nigerian Law, local legislation, ordinance. Act, Law, Decree, Edict). **Religion and National development in Nigeria:** The concept of religion in African Societies, Types of religion in Nigeria, Impacts of religion on Education, Social stability and economy. **A Historical analysis of Education and National Development in Nigeria:** An overview of Educational system in pre and post Colonial Nigeria, Nigerian Education after Independence, 1969 National conference on Education, Financing Education in Nigeria, National Policy on Education, Universal Basic Education(UBE). **The Nigerian Economy:** Indigenous Economic system, an overview of Nigerian Economy during the colonial era, the post colonial era Economy(The oil sector, Agriculture and Industrialization). **Media, Language and Culture:** Concept of Human communication, four Phrases of Human Communication Evolution, Mass Media, Culture and Cultural Values in Nigerian Ethnic diversities, the Question of National Language.

GSP 2205: LOGIC AND PHILOSOPHY

What is philosophy? scope and historical origin of philosophy. Science and analysis of Reality, metaphysics, ethics and epistemology. Idealism, Materialism, Naturalism and Realism. Logical terms Law of thought. Nature and fundamental principle of logic. Relationship between Logic and science, social sciences and Humanities. What is an argument? Cogent argument, refuting argument, repairing argument, fallacies. A summary of errors in reasoning.

GSP 2202: USE OF LIBRARY STUDY SKILLS AND ICT (FOR DIRECT ENTRY STUDENTS ONLY)

Same content as GSP 1202 above.

LEVEL 300

FIRST SEMESTER

ANA 3212: HEAD, NECK AND SPECIAL SENSES

Introduction, Face and scalp, Cranial cavity and meninges, venous sinuses, Orbit and content, Parotid region, Temporal and infratemporal region, Temporomandibular joint, Soft tissue of the neck, Root of the neck, Midline structures of the face and neck and Ear and vestibular apparatus.

ANA 3213: NEUROANATOMY

Introduction, Spinal cord, Brain stem, Cerebellum, Thalamus, hypothalamus, epithalamus etc, Basal ganglia and limbic system, Cerebral cortex, Cranial nerves and Blood supply and venous drainage of the cerebral hemisphere.

PYS 3203: PHYSIOLOGY OF RESPIRATION

Introduction and functional anatomy of respiration, muscles of respiration, air passages and pulmonary circulation, gas laws in relation to respiration, control and regulation of respiration, mechanism of breathing, lung and thorax compliance, work of breathing, pulmonary volumes and capacities, anatomic and physiologic dead space, respiratory regulation of acid/ base balance, hypoxia and abnormalities and diseases of respiratory system.

PYS 3211: CARDIVASCULAR SYSTEM II

Systemic circulation: systemic circulation, capillary fluid exchange, mechanism of oedema, arterial blood pressure and control of arterial blood pressure. Integrated cardiovascular response: cardiovascular response to exercise, cardiovascular response to haemorrhagic shock, effects of gravity on venous return, hypertension and hypotension.

PYS 3221: RENAL SYSTEM

General physiologic anatomy of the kidney, general functions of the renal system, renal circulation and regulation of renal circulation, renal blood flow (RBF), glomerular filtration rate (GFR), renal regulation of body water and electrolytes, clearance, measurement of GFR and RBF using clearance techniques, urine formation, counter current mechanism, acid/base balance and micturition and its abnormalities.

PYS 3143: NEUROPHYSIOLOGY II

Sensory system: classification, somatic sensation, and special senses V (visual, hearing, taste and smell and equilibrium sense). Motor system: spinal motor reflexes, organization of motor system, pyramidal system, extrapyramidal system, posture and locomotion. Integrative system: reticular activating system, EEG and sleep, fearing and memory, limbic system and motivation, and hypothalamus and temperature control.

PYS 3232: REPRODUCTIVE PHYSIOLOGY

Introduction and functional anatomy of the male and female reproductive organs, the male reproductive system, the female reproductive system, physiology of puberty and menopause, physiology of coitus and its abnormalities, fertilization and implantation, fertility and infertility and physiology of lactation and pregnancy.

SOC 3101: MEDICAL SOCIOLOGY

Introduction: What is sociology, Importance of sociology in medicine? The sociological perspective, functionalist perspective, conflict perspective, symbolic interactionism. Social organization and social change; changing patterns of society, the loss of community (Ferninand Tonnies), urbanization and its consequences, social welfare. Culture; Material and non-material culture, elements of culture: symbols, languages, values and beliefs and norms. Taboos, impact of culture on the conception of health and illness. Complex social organization, social institution, formal organizations, the hospital organization.

SECOND SEMESTER

PTY 3201: INTRODUCTION TO PHYSIOTHERAPY

Meaning of physiotherapy: definitions by international bodies like, MRTB, CSP, WHO, APTA, including NSP. Historical development/origin of physiotherapy in Europe, America and Nigeria. History of physiotherapy bodies like CSP, APTA and NSP. Scope of Physiotherapy training and practice. Brief descriptions of the specialties in physiotherapy including Neurology, cardiopulmonary, Paediatrics, women's health, Biomechanics, sports and geriatrics. Ethics of physiotherapy profession in Nigeria. Basic procedure. Scope of training.

PTY 3202: INTRODUCTION TO MEDICAL REHABILITATION

The team approach. The advantages of health care delivery team. Multidisciplinary, interdisciplinary and trans-disciplinary team models. Roles of Members of health team: surgeon, physician, physiotherapist, occupational therapist, speech therapist, clinical audiologist, optometrist, medical social worker, rehabilitation nurse and the nutritionist. Concept of acute and chronic illnesses. The functions of W.H.O. Critical analysis of ICIDH 1980 and ICF 2001 in defining health and disease states. Simple terms used in rehabilitation, ADL, IADL, functional recovery, health, pain, muscle strength, spasticity, rigidity, ROM. Vital signs in rehabilitation: pain, oxygen saturation, blood pressure, temperature, pulse rate and respiratory rates.

PTY 3203: BASICS OF EXERCISE THERAPY

Skeletal muscle structure and function (applied anatomy), Energy systems: Exothermic, Endothermic, body fluids and their significance to exercise (exercise physiology, Find common pathway of metabolism, Effect of single bout of exercise on body organs, Physiological responses and adaptations to chronic exercise in health and diseases, Evaluations of cardiopulmonary responses to exercise, Effect of exercise on body composition. Movement: Classification of movement, Fundamental starting position, Derived starting positions, Passive movements (relaxed, manipulative and forced), Active movements (free, assisted, assisted-resisted and resisted), Types of resistance used for therapeutic purpose. This course comprises of practical exams.

PTY 3204: ELECTROTHERAPY I (ACTINOTHERAPY, OTHER RADIATIONS & CONDUCTIVE HEATING)

Review of relevant physics (a) electromagnetic spectrum (b) physical properties of electromagnetic rays, reflection, refraction, absorption, penetration, parabolic reflection (c) Laws governing radiation (d) Principles of electromagnetism, electromagnetic induction, transformers: thermo-ionic emission, rectifiers, condensers,

rheostats, fuses, etc. Infrared rays: production, Emission of luminous and non-luminous generators, penetration of rays from the 2 types of generators. Physiological effects, therapeutic uses, indications and contraindications of infra-red rays. Techniques of application. Dangers and safety precaution. Conductive Heating modalities – paraffin wax bath and hot packs. Description of wax bath and hot pack unit. Principles of heat retention by each modality. Physiological effects, therapeutic uses, indications, contraindications, production, types of lamps, lamp accessories, methods and techniques of application. Dangers and safety measures. This course comprises of practical exams.

PTY 3205: THERAPEUTIC MASSAGE

Historical developments and definitions. Preparation for massage: patients, therapist, environment. Classification of massage manipulations. Individual massage manipulations. Techniques applied for: Upper and lower limbs, back, neck, face. Technique specific for: Scars, Ulcers, Oedema, Soft tissue injuries, Postural drainage of pulmonary secretion. Bandaging: types, uses and different methods of application. Emphasis on application of bandage for control of Oedema and support. This course comprises of practical exams.

PTY 3306: KINESIOLOGY

Discuss anatomic background essential for understanding human movement. Emphasise the relationship of anatomic structure to function. Highlight the application of muscular analysis of major segments of the body to selected common movements, either in sports, gymnastics or daily activities. Evaluate the fundamentals of mechanisms as they apply to movement analysis. Highlight principles of motion and force as they apply to the body to movement analysis. Highlight principles of motion and force as they apply to the body in action and in equilibrium. Illustrate biochemical concepts through experimental or mathematical derivation.

PTY 3407: GENERAL NURSING PROCEDURE

Nursing Charts: Methods of taking/recording patient's temperature, pulse, respiration: BP. Bed making: Prevention of bedsores: General skin care: Sterile dressing/bandaging: Nursing procedures in the management of Tracheostomy patients: Nursing procedures in the management of patients on artificial respirator: Lifting techniques/lifting of patients: Intramuscular/Intravenous Injection: Chemotherapy/Medication procedure on the wards: Nurse-Therapist relationship: Practical/Clinical Sessions.

PTY 3408: HYDROTHERAPY & CRYOTHERAPY

Hydrotherapy: Historical background, introduction to Hydrotherapy. Features of a Spa as an ideal treatment-centre facilities available in a modern Spa: indications and contra-indications. General and special properties of water. Hydrotherapy laws: density, relative density (Buoyance) Floatation, upthrust, surfaces tension, Pascal's law, viscosity, waves: resistance, Heat, specific heat, latent heat, humidity: relative humidity: temperature, ventilation, thermometer, hydrometer. Bath, contrast bath, practical demonstration. Details of effects indications and contra-indications. Baths, immersion, various types and classification, temperature of baths, dosage, records, factors affecting effects of baths, mode of application. Practical application of plain water immersion-bath on student Demonstration to students other forms of bath douche and spray. Effect of baths. Function of skin in relation to baths. Treatment in pools (Swimming pools and Hydrotherapy pools). Whirlpools for hydrotherapy: effects and uses. Exercise in water. Position – fixed semi-fixed, floatation with support for floating. Techniques for resistance, mobility, in walking agility exercise. Techniques in treating conditions: poliomyelitis, spasticity, rheumatism and orthopaedics. Types of pool, care and maintenance. Comparison of exercises in and out of water. Water diseases: Prevention and treatment Schemes of treatment. Cryotherapy: Historical development of cryotherapy. Methods and techniques of application. Physiological effects, therapeutic uses, indications and contra-indications. Dangers and safety measures. This course comprises of practical exams.

EET 3201: ENTREPRENEURSHIP AND INNOVATION

Developing entrepreneurship, The Nigerian entrepreneurial; creativity and intellectual right, Technological entrepreneurship, Management of innovation and Family business, succession planning. Women entrepreneurship, social entrepreneurship. Business opportunity evaluation.

LEVEL 400

FIRST SEMESTER

PTY 4201: ELECTROTHERAPY II (HIGH FREQUENCY CURRENTS AND LASER THERAPY)

Review of relevant physics as in Electrotherapy I. Short wave Diathermy: Principles of production. Physiological effects, therapeutic uses, indications and contraindications. Technique of application. Dangers and safety precautions. Microwave Diathermy: Principles of production. Physiological effects. Therapeutic uses/effects, indications and contraindications. Techniques of application, dangers and safety precautions. Ultrasound: principles of production, physiological effects, dosage therapeutic uses, ultrasound treatment parameters, indications and contraindications. Methods and techniques of application. Dangers and safety measures. Phonophoresis. Laser therapy: Principles of production, types and uses, physiological effects, therapeutic uses, indications and contraindications, dosage, techniques of application, dangers and safety precautions. This course comprises of practical exams.

PTY 4202: TECHNIQUES OF EXERCISE THERAPY

Review anatomy of the skeletal muscles upper limb, lower limb, back, abdomen, neck, Epimysium, perimysium, endomysium, muscle fiber, tendons, motor unit, muscle nomenclature, types of muscle contraction, (muscle work) tonic and phasic muscles, muscle functions and impairment, muscle assessment, manual muscle testing, muscle strengthening, repetition maximum. Review anatomy of joints and joint structures, joint types and designs, joint functions, assessment of joint range of motion, goniometry, joint mobilization. Muscle strengthening and joint mobilization: Progressive resistance exercise: Principle and techniques of exercise regimen; modalities for muscle strengthening; basis for choice of modality; role of motor unit in muscle strengthening; evaluation of normal range of motion (Rom); causes of loss of full Rom; indications and contraindications for joint mobilization; modalities for joint mobilization; peripheral mobilization techniques (Maitland and other approaches); chest physiotherapeutic exercises including coughing (humidification and other procedures). This course comprises of practical exams.

PTY 4304: PATHOKINESIOLOGY

Pathokinesiology: Discuss approaches to kinesiological analysis of human motion. Discuss different classification of motor skills. Highlight clinical applications of these motor skill. Identify and analyze normal and abnormal human movements e.g. normal and abnormal gait. Identify and analyze normal and abnormal human postures. Prescribe corrective therapy for abnormal motions and postures. Crutch walking. Types of crutches. Preparation of patient. Methods of measuring for weight bearing. Dangers and safety measures. Other walking aids. Frame walker. Walking stick/canes. Pushcarts. This course comprises of practical exams.

PTY 4206: INTRODUCTION TO PHARMACOLOGY

Routes of drug administration including topical administration, Drug distribution in the tissues, Drug elimination, Drug absorption, Time course of drug action/half-life, Drug toxicity and mechanisms of detoxification, Drug metabolism, induction inhibition and interactions, species, age and gender variations in drug metabolism, Drug resistance, dependence and allergies. Teratogenesis, mutagenesis and carcinogenesis.

PTY 4207: INTRODUCTORY PATHOLOGY

Introduction to general pathology, brief introduction to clinical and anatomic pathology, causes of injury and diseases, inflammatory changes, suppuration, abscess formation, degeneration, repair of tissues and factors on which rate of repair depends.

PTY 4208: ORTHOPEDICS & RHEUMATOLOGY

Review of relevant anatomy where appropriate: Diagnosis in orthopaedics, subjective assessment, objective assessment, Deformities: Types (congenital and acquired) causes, examples of congenital deformities, Examples of acquired deformities, examination, medical and physiotherapy management, General bone affections, Bone dysplasia and malformations: osteogenesis imperfecta, Pagets disease, Metabolic bone disease: osteoporosis, Local bone affections: osteomyelitis, tuberculous bone infection, Fracture: classification; pattern; complications; healing; deformities; management (closed and open reductions, immobilization and rehabilitation), Fracture of specific bones and sites: Humerus, forearm bones, pelvic, femur and tibia complication of fracture at specific sites should be emphasized, Displacement of joint: dislocation and subluxations (detailed discussion)

dislocations and subluxations in the upper limbs, Dislocations and subluxations in the lower limbs, age and sex differences to dislocations and subluxation, Amputation: prevalence, aetiology, patient assessment, common complications, types or classification in the upper and lower limbs, psychosocial adjustment, phantom limb pairs; management: goals, bandaging, phases of physiotherapy management (preoperative, postoperative and prosthetic) Rheumatology: seropositive arthritis: rheumatoid arthritis (RA), immunopathology of RA, common clinical manifestations, disease course, genera; assessment differential diagnosis, Seronegative arthritis: ankylosing spondylitis, osteoarthritis and related disorders Metabolically related arthritic: Gout, Infectious (septic) arthritic: specific joints, hip, knee, shoulder, tuberculous arthritics (hip and spine) Connective tissue disease: systemic lupus erythematosus: all conditions must be treated adequately on the basis of the definition, aetiology, epidemiology, examination, management with emphasis in physiotherapy management.

PTY 4209: EXERCISE PRESCRIPTION

Group exercise therapy, suspension therapy, Truck (cervical & Lumbar), Relaxation techniques, Health promotion through exercise, exercise prescription for various conditions, exercise for the treatment of specific types of diseases conditions urinary incontinence, obstetric palsy, Physical fitness program, etc. This course comprises of practical exams.

PTY 4210: PHYSIOTHERAPY IN GENERAL SURGERY

Introduction to common surgical terms and nomenclature, common surgical incisions, Review of anatomy of the thorax and abdomen, Thoracic, cardiac and high abdominal surgery, complications associated with the above surgical approaches, pre and post-operative physiotherapy management, anaesthesia and its physiological effect on respiratory, circulatory and musculoskeletal systems, post-operative complications secondary to anaesthesia e.g embolism and thrombosis, Physiotherapy management of complications resulting from the use of anaesthesia, intensive physiotherapy following surgical procedures, the pleural cavity and lungs e.g., lobectomy and pneumonectomy and their complications, open and closed hear surgical procedure, abdominal surgery, neurosurgery, plastic surgery, burns, classification, percentage, complications resulting from burns, physiotherapy management of burn patient, pressure sore, aetiology, classification, physiotherapy management, accident and emergencies, transfer of the unconscious patient from an accident scene, Glasgow coma scale, management of the unconscious patient.

PTY 4211: RESEARCH METHODOLOGY

Definition of research/need for research in physiotherapy, Goals of research, Concepts, Theory, Models, Empirical research, stages of research, Nature of research problems: factors influencing selection of research problem sources of research topics, variables and types of variables, literature review, citation and bibliography (APA style) Hypothesis: types and formulation of hypothesis, one tailed and two tailed hypothesis, Research design: sampling and sampling techniques, scales of measurement, nominal, ordinal, interval, ratio, reliability and validity of measurement, Types of reliability: intra-tester, Types of Validity: content, construct, criterion related, Data collection techniques: questionnaire, observation, experimentation, step by step of writing research proposal and project.

PTY 4213: CARDIOPULMONARY AND METABOLIC DISORDERS

Review of relevant anatomy and physiology (of the heart and respiratory tract). Conditions to be treated in detail: Pneumonia, chronic bronchitis and emphysema, bronchiectasis, pleurisy – the 3 forms to be discussed, cystic fibrosis, tuberculosis (pulmonary TB), cardio pulmonary, lung abscess, pneumothorax, asthma, physical examination of a patient with respiratory condition, breath sounds – normal and abnormal, disorders of the thoracic cage e.g. pectuscarinatum, hypertension, coronary heart disease/myocardial infarction, rheumatic heart disease, cardiac rehabilitation, diabetes mellitus, Note, each of the above conditions is to be discussed under the following headings/sub-topics: definition, aetiology, pathology, clinical features/signs and symptoms, medical and surgical management, physiotherapy.

EET 4201: VENTURE CREATION AND GROWTH

Theories of Growth: An overview of business and new value creation financing. Sources of funding, Marketing, New Opportunity for expansion, Ethics and social responsibility, Managing Transition. From start up to growth.

SECOND SEMESTER

PTY 4203: MANIPULATIVE THERAPY (SPINAL THERAPY)

Historical Background/Philosophies of spinal manual therapy. Bone setting. Osteopathy. Chiropractic Manipulative Therapy in recent times. Anatomy and Biomechanics of the Spinal Column/Cord. Spinal joints. Ligaments. Intervertebral discs. Nerve supply of the vertebral articulations. Movements of the column. Surface anatomy. Examination of the patient with Back problems. Techniques of Spinal Manual Therapy: Direct, Indirect, Specific, Non-specific, Manipulative thrust, oscillatory technique. Clinical Application of spinal Manual Therapy: Manipulative Thrust, Oscillatory Techniques. Contra-indications of spinal manual therapy: Absolute contra-indications. Relative contra-indications, Manipulative therapy with care, Traction on the spine. Types of traction. Loading of the spine. Practical sessions in the school clinic. This course comprises of practical exams.

PTY 4205: STATISTICAL TECHNIQUES

The central role of statistics in medicine, Basic statistical tools for describing date scales of measurements, nominal, ordinal, interval, Ratio, Presentation of Data, Frequency distribution table (grouped and ungrouped) graphical presentation:, bar chart, Histogram, Frequency polygon, measures of central tendency and their applications, measures of dispersion (variability) and their applications, Types of statistical tests: parametric statistics, non parametric statistics emphasis should be made on where each is appropriate, correlational statistics, Parametric: t-test, ANOVA, Non parametric: Chi-square, Mann-Whitney , correlational: Pearson product moment correlation coefficient Spearman rank order correlation coefficient, Hypothesis: Hypothesis testing, level of significance.

PTY 4412: PROSTHETICS & ORTHOTICS

Definition of prosthesis. Different types of Prosthesis. Materials for upper limb prosthesis. Materials for lower limb prosthesis. Principles of construction of Prostheses. Prostheses for below knee amputation, Prostheses for above knee amputation. Problems associated with prostheses particularly – upper/limb prostheses. Identification and recognition of prostheses. Types and uses of splints – back slab, cork-up splint night splint, full leg pop, Hipsica; below knee pop-kite plaster. Splint construction using different materials. Selection, care and training in the use of splints. Principles of construction, fitting and uses of the various types of braces – e.g knee cage, ring top, cuff top – below knee calipers, shoe insert. Criteria for selection of a corsets and braces. Indication, uses and principles of construction and fitting of cervical collars. Physical assessment of amputees. Check out procedures for upper and lower limp Prostheses. Gait training, instructions in the uses and care of prostheses. Aid for Daily living: Review of the uses and prescriptions for wheel chairs. Review of uses and prescriptions of crutches, walking sticks, canes and aids for daily living.

PTY 4214: EXERCISE IN HEALTH AND DISEASE

Exercise: definition, types (isotonic, isometric and isokinetic), effects on different body systems especially on cardiopulmonary, musculoskeletal, endocrine and nervous systems. Forms of exercise (walking, jogging, running, use of treadmill and bicycle ergometer). Merits and demerits of treadmill and bicycle ergometer exercises. Exercise dosage: intensity (use of VO_2 max and HR max), duration, frequency and mode. Computation of VO_2 max (direct and indirect methods), HR max target HR and target VO_2 . Physical fitness and its' components. Bioenergetics: carbohydrate, fat and protein metabolism. Exercise for improvement of cardiopulmonary endurance in healthy individuals. Benefits and hazards of exercise in diseases: hypertension, diabetes mellitus, coronary heart disease, obesity and overweight, osteoporosis, etc. Detailed discussion of the conditions mentioned above is required. Ergogenic aids: state and explain the different categories with appropriate examples. International laws that govern the use of ergogenic aids.

PTY 4215: ELECTROTHERAPY III (DIRECT AND LOW FREQUENCY CURRENTS)

Review of relevant physics. Electricity and magnetism. Forms of current: Direct, alternating. Low frequency electrical stimulating currents: physiology of nerve stimulation. Electrical stimulation of the excitable tissues (nerve and muscle). Accommodation. Faradic type current: definition, parameters, motor points, methods of application, physiological effects, therapeutic uses, indications, contraindications, dangers and precautions, techniques of application faradic bath, faradism under pressure. Interrupted galvanism: definition, parameters, methods and techniques of application. Physiological effects, therapeutic uses indications and contraindications,

dangers and precautions. Direct current (galvanism): definition, parameters, methods and techniques of application. Physiological effects, therapeutic uses. Indications and contraindications. Dangers and precautions ion to phoresis especially in the management of wounds and hyperhidrosis. Electrodiagnosis: strength: duration curves, electromyography, chronaxie, rheobase, nerve conduction test, faradic test etc. Values of each method to be discussed. Transcutaneous electrical nerve stimulation (TENS): Definition, parameters, types, technique of application, therapeutic uses, indications and contraindication, dangers and precautions. Interferential therapy: Definition, parameters, methods and techniques of application, physiological effects, therapeutic uses, mechanisms of pain relief, indications and contraindications, dangers and precautions.

PTY 4216: PATHOLOGY

Healing in different types of tissues, physiotherapy in relation to repair, changes in circulation, anemia and hyperemia: oedema formation and drainage of tissue fluids, mechanisms of development of oedema; Thrombosis, embolism and infarcts, atrophy, hypertrophy and hyperplasia, neoplasia and tumours, neurosis, osteoporosis, bone and joints diseases, skin and muscle tissues diseases.

PTY 4217: PHARMACOLOGY

Analgesics NSAIDS, steroids and narcotics. Mode of action, adverse reactions, Muscle relaxants, sleep and anxiety, antihypertensives and drugs for cardiac failure, mode of action, adverse reactions, effects on vital signs during exercise, Drugs if diabetes, mode of action, adverse reactions, effects on vital signs during exercise, respiratory stimulants (analeptics) pulmonary surfactants, expectorants and mecolytics, oxygen therapy, antihistamines and bronchodilators, anticoagulants, thrombolytics, and antifibrinolytics antiplatelet drugs and haemophilia, vitamins, indication, contraindications and hypervitaminoses, drugs for epilepsy, parkinsonism, myasthenia gravis and related diseases, anaesthetics and their respiratory influence, exercise and drug metabolism.

PTY 4618: CLINICAL PHYSIOTHERAPY I

Patient/student contact. The use of principles learnt in the classroom and during practical sessions under supervision of a qualified therapist. The student will be expected to keep a logbook and to insert in it, his/her in-patient and outpatient ward activities. He/she will also be expected to write out records of evaluation and treatment as directed by the supervising therapist. Application of the knowledge of physiotherapy assessment skills and physiotherapy modalities on patients for preventive, alleviating and health promotion purposes under the supervision of experienced physiotherapists.

PTY 4219: NEUROLOGY

Review of neuroanatomy and neurophysiology. Assessment, evaluation and treatment of neurological neuromuscular disorders among which are: stroke, Parkinson on disease, head injury, tumour, paraplegia, quadriplegia, tabes dorsalis, disseminated sclerosis, syringomyelia, spinal meningitis, meningocele, adult poliomyelitis, Guillain barre syndrome, encephalitis lethargica, peripheral nerve disorders, causalgia, neuralgia, Huntington's disease, motor neurone disease eg progressive muscular dystrophy and progressive bulbar palsy and amyotrophic lateral sclerosis.

PTY 4320: COMPUTER APPLICATIONS IN PHYSIOTHERAPY & MEDICINE

The use of computers in medical libraries, research, record keeping, billing, laboratories, physical therapy education/training. Simulation in multiple scenarios. Computers and medical data analysis: scanning and imaging. Computers in radiology and radiotherapy. Computers as tools in diagnosis. Computer based technology in rehabilitation. Introduction to some medical software. Detailed treatment of spread sheets and their application in the medical field. Introduction to some statistical packages. The internet, browsers and search engines. Conducting a search. Practical sessions.

END OF POSTING EXAM

This constitutes both internal and outside department postings. It is scored as continuous assessment of the clinical exam.

External posting (First Semester): This comprises of Medicine and Surgery Postings run in hospitals other than the teaching hospital. At the end of the posting the student is expected to have a firm grasp of the following topics: diagnosis in orthopaedics, radiologic examinations in orthopaedics, rheumatic conditions, traumatic

affectations orthopaedic emergencies, other orthopaedics conditions, management of rheumatic and traumatic conditions, surgical procedures in orthopaedics (student are expected to attend as many operations as possible within the period of the posting), orthopaedic clinics, other orthopaedic approaches deemed beneficial to students by the consultant in charge, students are to be examined at the end of the posting.

Internal posting (Second Semester): This comprises of all speciality postings in the department (Medicine/Surgery/Obstetrics & Gynecology/Pediatrics/Cardiopulmonary) rotated as inpatient and outpatient in the teaching hospital.

Patient/student contact. The use of principles learnt in the classroom and during practical sessions under supervision of a qualified therapist. The student will be expected to keep a logbook and to insert in it, his inpatient and outpatient ward activities. He/she will also be expected to write out records of evaluation and treatment as directed by the supervising therapist.

SIWES I

At the end of Level 400, students are expected to spend their holiday going through a rotational outside posting in various health organizations. This is aimed at introducing the students to the different institutions under which they may be required to work. The students will be required to go through this practical training for at least two months comprising of hospitals having physiotherapy units, sports and rehabilitation centres. The students will be under the supervision of physiotherapists.

LEVEL 500

FIRST SEMESTER

PTY 5201: GERIATRICS

Definition of Geriatrics. Types of Aging process and associated changes. Muscles. Bones/Joints. Nervous System Cardiovascular/Respiratory Skin. Developmental Theory of Ageing. Buhler theory. Peck's theory. Daviddof theory. Incontinence and Constipation in the Elderly. Hazards associated with the elderly. Assessment of the Elderly. Disease common in the elderly. Cardiovascular. CNS Pneumonia. etc. Eye disease. Hearing disorders. Musculo-skeletal disorders. Fractures. Parkinsonism. Mental confusion and dementia. Care of the elderly and the role of physiotherapy in geriatrics.

PTY 5202: OBSTETRICS & GYNAECOLOGY

Review of relevant anatomy, Pregnancy and physiology of pregnancy: Menstruation, pregnancy and fetal development, Complications of Pregnancy: ectopic, pre-eclamptic toxemia, eclampsia, ante partum hemorrhage, placenta praevia, diabetes mellitus, Physical and physiological changes of labor: the stages of labor, signs of labor, normal labor and delivery, labor pain and causes of labor pain, the effect of labor on the pelvic floor and perineum, the duration of labor, apgar score, Complications of labor: failure to progress, maternal and fetal distress, mal-presentation, prolapse or presentation of cord, hemorrhage (APH and PPh), contracted pelvis and cephalopelvic disproportion, The puerperium: Puerperium and its briefly activity, Complications in the puerperium: postpartum hemorrhage, venous thrombosis, pulmonary embolism, gravitational oedema, fistulas, The antenatal period: members of the antenatal medical team, antenatal problems, Sacroiliac dysfunction, osteoporosis of pregnancy, nerve compression: carpal tunnel, posterior tibial nerve compressor, circulatory disorders: varicose veins in legs, haemorrhoid, cramp, pain relief in labor: drugs for pain relief in labour, TENS in the management of labor pain, Lamaze (distraction analgesia) Postnatal problems: urinary retention, urinary incontinence, deep vein thrombosis, pulmonary embolism, Caesarian section: pain in CS, respiratory problems in CS, teaching effective coughing, TENS in CS, Common gynecological problems: pelvic inflammatory disease, cystocele, urethrocele, enterocele, uterine prolapse, dysmenorrhoea, female athlete triad, Detailed approach continence and in continence. Where appropriate conditions must be discussed in detail including the definition, aetiology, epidemiology, investigation, medical and physiotherapy management.

PTY5203: NEURO-PHYSIOLOGICAL BASES OF THERAPEUTIC EXERCISE

Sensory and Motor pathways: Neurone (Motor-neurone and Sensory neurone). Synapse and their properties. Spinal cord Reflex mechanism (Reflex Arc). Lower motor Neurons/Functions. Pyramidal pathways or systems/functions. Extrapyramidal pathways/functions. Associated problems following lesions of above

pathways. Postural Reflexes. Reflexes for maintaining upright position against gravity. Myotatic Extensor Reflexes. Tonic postural Reflexes. Reflexes for obtaining upright position and body alignment (righting Reflexes). Labyrinthine righting reflex. Tonic neck reflexes.

PTY 5304: PAEDIATRIC PHYSIOTHERAPY

Normal developmental process from fetal period to adulthood under the following headlines: normal development across domains, developmental theory, and motor control, neonatal reflexes, and role of reflexes in movement development. Neurological disorders: CNS malformations, CNS infection and inflammatory diseases, in childhood, head injury in childhood, CNS tumours in childhood, CVD in childhood, neurocutaneous syndromes, spinocerebella degeneration, neural tube defects, poliomyelitis, chromosomal disorders muscle disorders in childhood, Erbs' palsy, Klumpke's palsy, Pulmonary Conditions: Pneumonia, asthma, cystic fibrosis, pulmonary tuberculosis, lung abscess, bronchiectasis, bronchitis, congenital soft tissue malformation: Torticollis, talipes equinovarus, talipes equinovagis, talipes calcaneovagis. Congenital deformity of the hip. Students are to be taught various ways of examining and management of these conditions.

PTY 5305: COMMUNITY PHYSIOTHERAPY AND ERGONOMICS

Principles and practice of community physiotherapy: Definition – Community physiotherapy. Historical background of community physiotherapy. Aims and objectives of community physiotherapy. Community physiotherapy services and the therapist. Community physiotherapy services and the government. Referrals in community physiotherapy. Itinerary and Domiciliary aspect of physiotherapy – requirements and prospects. The physiotherapists outlook in Community Physiotherapy. Treatment facilities for comm. physiotherapy. Personnel/Manpower for community Physiotherapy. Advantages, disadvantages and problems associated with Community Physiotherapy practice. Field work/experience in Community Physiotherapy. Ergonomics: Man and his work environment. Home accidents and safety. Industrial accidents and safety. Poor working postures. Poor furniture designs.

PTY 5206: NUTRITION IN HEALTH AND DISEASE

Introduction to food substances: carbohydrates, proteins, fats and oils. The nutritional values of food additives; their effects on health and diseases. Food processing, presentation, preparation and diet therapy. Relationship of digestion and absorption of food. Nutritional quality of foods and diets selection and formation. Balanced diets, weaning diets, use of food composition tables. Nutrition requirements of individuals and recommended daily calorie intake. Food in relation to life cycles, fitness, illnesses. Nutritional factors in diseases. Aetiology of nutritional disorders such as kwashiorkor; marasmus, diabetics, assessment and advices. Enteral and perenteral nutrition, indications and contraindications of some diets and illnesses.

PTY 5208: DERMATOLOGY

Review of anatomy and physiology. Assessment and management of the following conditions: Acne vulgaris, boils, whitlows, carbuncles, psoriasis, alopecia (areata, totalis, universalis), vitiligo, eczema and leprosy. Also, management of burns, wounds and scars, pressure sores and other forms of ulcers, infected wounds and skin graft.

SECOND SEMESTER

PTY 5607: RESEARCH PROJECT

Students are expected to write a research proposal and defend it. During the defence, it is expected of students to be able to demonstrate that they know what they are seeking and how they will recognize it and explain why the search is worthwhile. This is followed by field work and final defence of the entire findings.

PTY 5309: INTRODUCTION TO SPEECH THERAPY

Definition: anatomy and physiology of speech and hearing mechanisms, introduction to normal human communications, survey of speech therapy, pathology and audiology. Applied phonetics, articulation disorders, language disorders in children, aphasia and associated disorders. Identification, assessment and treatment of various conditions that have speech affection as a complication in children and adults eg., cerebral palsy, infantile hemiplegia, stroke and head injuries. Sign languages.

PTY 5310: INTRODUCTION TO OCCUPATIONAL THERAPY

Definition, theory, scope and practice of occupational therapy. Occupational therapy in neurology, geriatrics, pediatrics and orthopaedics. Therapeutic occupation in relation to adaptive equipment and techniques, functional evaluation and reporting in occupational performance, orthotics and environmental adaptations. Activities of daily living (ADL) psycho-social implications of inability to carry out basic ADL. General classification of ADL. Self-care activities, ambulation, elevation and traveling activities, hand activities. These activities are taught to bed patients, wheel chair patients and ambulatory patients. Bed and mat exercises to develop strength, mobility and balance in preparation to perform the necessary motions for self-care activities in bed and wheel chair and to prepare patient for crutch walking. Outline of exercises for teaching ADL: Exercises without appliances. Ambulation exercises (with or without appliances). Preparation for crutch walking exercises, elevation exercises eg., from sitting to standing position and reverse.

PTY 5311: PHYSIOTHERAPY ADMINISTRATION AND MANAGEMENT

Basic Health Services: Primary Health care, secondary Health care, Tertiary health care. Basic Administrative structure of a teaching hospital as spelt out by Decree 10 of 1985: Management Board, Membership, functions of the board, management committee, membership, functions of the board, management committee, membership – chief medical directors as chairman, functions. Clinical services/training directorate – chairman, medical advisory committee. Directorate of Administration – Director of Administration. Basic goals of tertiary health care institution. Basic Physiotherapy set-up and organization: Services and facilities. Out patient services unit (OSU). In-patient services unit (ISU). Operating both units on specialty area basis (SAB) as spelt out by Decree 38 of 1988 – paediatrics. Obstetrics and Gynaecology, Surgery/Orthopaedics and Medicines including chest conditions and psychiatry. Treatment equipment/facilities. Diagnostic equipment. Electrotherapy equipment. Cryotherapy equipment, Gymnasium equipment. Hydrotherapy pool physiotherapists – Equipment handling/care. Treatment and office facilities in a physiotherapy department of average standard. HOD/Chief Physiotherapist office. Staff offices. Toilets (Staff/Patients). Patients waiting space or area. Physiotherapist records Area/Reception. Department store. Coffee/Common room. Consulting room(s). Electrotherapy treatment area. Gymnasium department, library. Administrative organization: HOD/Chief Physiotherapist/Functions. Unit Heads/Function. Employment/|Promotion. Responsibilities and Communications. Discipline/Accountability. Physiotherapy scheme of service or nomenclature as spelt out by civil service commission in January 1982. Physiotherapy Internship (Decree 38 of 1988) and accredited hospitals for internship. Professional practice and code of ethics. Ethics in relation to physiotherapy. Physiotherapy oath of practice. Ethical requirements of physiotherapy practice. Professional competence physiotherapist and personal ethics. Patient-therapist relationship. Physiotherapist – other health team professional relationship. Physiotherapy code of conduct (ethics) as prescribed by the Nigeria Society of Physiotherapy (NSP). Patients records keeping review of patients conditions. Private and domiciliary physiotherapy practice. Registration/licence with government registration/licence with medical rehabilitation therapist board of Nigeria. Problems associated with private/domiciliary practice. Mode of charging (bills) patient treatments. Physiotherapy governing body. Medical rehabilitation therapist board of Nigeria (degree 38 of 1988 – MRTB. Nigeria Society of Physiotherapy (NSP): Function/duties. Membership. Registration with NSP and MRTB. Physiotherapy employment Opportunities. Hospital (govt. and private). Sport commissions. Geriatric Homes. Industries (Industrial Physiotherapy). Disabled Homes. Private physiotherapy clinics and centers. Self Employment – Domiciliary physiotherapy. Physiotherapy consultancy: Honorary Consultant appointment with teaching and specialist Hospitals. Remuneration. Functions/duties. Consultant – Therapist Relationship.

PTY 5213: MEDICAL DIAGNOSIS

Definition of medical diagnosis, importance of medical diagnosis. In depth teaching of how to talk to patients, carry out clinical assessment and arriving at a definitive diagnosis in medicine. Interpretation of patient signs and symptoms, medical background, results of laboratory tests and x-rays, ECG, etc. Differential diagnosis of conditions whose signs/or symptoms are shared by various other conditions. Clinical measurements and instrumentations – definitions of measuring instruments and evaluations; selecting and developing measuring instruments; concepts of validity, reliability and administration, measurement of specific variables, vital signs, pain, muscle strength (static, isotonic, isokinetic) muscle endurance, muscle tone, range of joint motion,

anthropometric measurements, cardio-respiratory fitness measurement (stress test); lung function tests, motor function tests. Use of validated software assessment formats such as VAS, PAR-Q Quality of Life assessment format, Health status index etc.,

PTY 5614: CLINICAL PHYSIOTHERAPY II

Patient/student contact. The use of principles learnt in the classroom and during practical sessions under supervision of a qualified therapist. The student will be expected to keep a logbook and to insert in it, his/her in-patient and outpatient ward activities. He/she will also be expected to write out records of evaluation and treatment as directed by the supervising therapist. Application of the knowledge of physiotherapy assessment skills and physiotherapy modalities on patients for preventive, alleviating and health promotion purposes under the supervision of experienced physiotherapists with greater responsibilities in patient care.

PTY 5215: SOFT TISSUE DISORDERS AND SPORTS INJURIES

Soft tissue disorders: Review of relevant anatomy and physiology epidemiology of soft tissue disorders, Injuries to ligaments: Assessment of ligamentous injuries sprain, strain and rupture, site specific ligament injuries (knee and ankle), Tendon injuries, strain, partial and complete rupture, tenosynovitis, injury to muscles: contusion, strain, rupture, site specific muscle lesion, hamstrings, rotator cuff syndrome, quadriceps, long head of biceps brachii and capsulitis: physiotherapy management of all the above injuries must be treated in detail, Sports injuries: General introduction to sports injuries, Epidemiology: sites of injury, number of how of play, age of athlete, Basic biomechanics of injury: various forces and injury, laws of motion and injury, stress and strain, relationship between load and deformation, leverage and injury, centre of gravity and stability, Biomechanics and Kinesiology of muscle: muscle attachment, Group action of muscles, Ballistic and reciprocal actions, Two joint muscles, Length tension relationship, Joint mechanics (accessory movements, concave – convex motion, close and loose pack,) General assessment of sports injuries. Classifications of injury: bony, joint and soft tissue, Sport Specific injuries: tennis, elbow, golfers' elbow and other several injuries associated to specific sports, Head injury, cervical injury, Inflammatory reaction, Healing process.

RESEARCH SEMINAR

Each student writes a seminar and presents this as a departmental seminar. Seminars on issues such as determinants of health, disease prevention and health promotion with focus on selected population (women, children and the elderly); Evidence Based" decision making and practice. The student is graded for the quality of the seminar, his/her ability to respond intelligently to questions raised, and his/her attendance and participation when his/her colleagues present seminars.

SIWES II (COMMUNITY OUTREACH)

During the second semester or at the end of Level 500, students are expected to spend 3-4 weeks going through community posting in a given community proposed by the department in a given speciality area. The choice of the theme is based on rotation of speciality. This is aimed at introducing the students to the different circumstances under which they may be required to work. The students will be under the supervision of physiotherapists.

END OF POSTING EXAM

This constitutes both internal and outside department postings. It is scored as continuous assessment of the clinical exam.

Internal posting (First Semester): This comprises of all speciality postings in the department (Medicine/Surgery/Obstetrics & Gynecology/Pediatrics/Cardiopulmonary) rotated as inpatient and outpatient in the teaching hospital.

Patient/student contact. The use of principles learnt in the classroom and during practical sessions under supervision of a qualified therapist. The student will be expected to keep a logbook and to insert in it, his in-patient and outpatient ward activities. He/she will also be expected to write out records of evaluation and treatment as directed by the supervising therapist.

External posting (Second Semester): This comprises of Radiology and Psychiatry postings in the teaching hospital.

Psychiatry posting: Definition of psychiatry and psychiatric disorder, prevalence of psychiatric disorder, Classification of psychiatric disorder, Adjustment disorders and stress reactions, Depressive illness, Anxiety, Para

suicide and suicide, Alcohol abuse, Substance abuse (opiate dependence, amphetamine abuse, cocaine abuse, cannabis, hallucinogens, benzodiazepine dependence, Mental retardation, Organic brain syndromes, Neurosis, Sexual disorder, Psychiatric aspects of physical illness, The psychoses, Schizophrenia, Psychotherapy and counselling, Psychological testing tools, Basic principles of psychoanalysis, iatrogenic complications of psychiatric medications, Cognitive therapy.

Radiology posting: It is intended that at the end of the posting the student should have a firm grasp of the following: History of x-ray and generation rays, fundamentals of skeletal radiology, radiological investigations in orthopedics, manifestations of skeletal disorders, lesions in specific anatomical areas, respiratory system, the heart, the plain abdomen, the gastrointestinal tract, the urinary tract, the use of contrast media, joints, the skull and sinuses, positioning concepts, isolating specific disease conditions on the radiograph e.g., chest conditions (respiratory and cardiac) joint conditions, the paediatric radiograph, the chest and other significant feature, precautions in radiology, other forms of imaging, ultrasound, CT-scan etc., radiotherapy, principles and approaches in radiotherapy.

SECTION FIVE: LIST OF CORE ACADEMIC STAFF OF PHYSIOTHERAPY DEPARTMENT AND SERVICING DEPARTMENTS

5.1. FULL TIME ACADEMIC STAFF

S/N	NAME	QUALIFICATIONS/DEGREE WITH DATES	PRESENT RANK	Specialty/Area of Interest
1	Dr. Jibril Mohammed	B.Sc. (2006); M.Sc (2010); Ph.D. (2018)	Senior Lecturer/Head	Cardiopulmonary
2	Prof. Ganiyu Sokunbi	B.Sc. (1995); M.Sc. (2001); Ph.D. (2007)	Professor	Orthopedics
3	Dr. Mukadas Oyeniran Akindele	B.Sc. (1992); M.Sc. (2010); Ph.D. (2015)	Associate Professor	Orthopedics
4	Dr. Rufai Yusuf Ahmad	B.Sc. (2002); M.Sc (2009); Ph.D. (2012)	Associate Professor	Neurology
5	Dr. Bashir Bello	B.Sc. (2002); M.Sc (2010); Ph.D. (2016)	Associate Professor	Orthopedics
6	Dr. Isa Usman Lawal	B.Sc. (1999); M.Sc (2006); Ph.D. (2015)	Associate Professor	Neurology
7	Dr. Jibril Mohammed Nuhu	B.Sc. (1999); M.Sc (2008); Ph.D. (2016)	Associate Professor	Cardiopulmonary
8	Dr. Adedapo Wasu Awotidebe	B.Sc. (2008); M.Sc (2009); Ph.D. (2013)	Senior Lecturer	Orthopedics/ Geriatrics
9	Dr. Bashir Kaka	B.Sc. (2003); M.Sc (2011); Ph.D. (2015)	Senior Lecturer	Orthopedics
10	Dr. Umar Muhammad Badaru	B.Sc. (2004); M.Sc (2012); Ph.D. (2017)	Senior Lecturer	Neurology/ Pediatrics
11	Dr. Kabir Isa Mayana	BPT (2008); MPT (2011); Ph.D. (2021)	Lecturer I	Orthopedics
12	Dr. Auwal Abdullahi	B.Sc. (2005); M.Sc. (2013); Ph.D. (2021)	Lecturer I	Neurology
13	Dr. Farida Garba Sumaila	B.Sc. (2006); M.Sc. (2014); Ph.D. (2021)	Lecturer I	Orthopedics
14	Mahmoud Yunusa Usman	B.Sc. (2006); M.Sc (2012)	Lecturer I	Pediatrics/ Neurology
15	Zakari Kani Musa	B.Sc. (2001); M.Sc (2012)	Lecturer I	Orthopedics/ Ergonomics
16	Sa'adatu Abubakar Maiwada	BPT (2011); M.Sc. (2015)	Lecturer I	Orthopedics/ Women Health
17	Aisha Shittu	B.Sc. (2006); M.Sc. (2014)	Lecturer I	Cardiopulmonary
18	Naziru Bashir Mukhtar	B.Sc. (2008); M.Sc. (2014)	Lecturer I	Orthopedics
19	Muhammad Aliyu Abba	B.Sc. (2009); M.Sc. (2014)	Lecturer I	Neurology
20	Jibrin Sammani Usman	BPT (2012); M.Sc. (2016)	Lecturer I	Neurology
21	Dr Surajo Kamilu Sulaiman	B.Sc. (2008); MPT (2015); Ph.D. (2020)	Lecturer I	Community Rehabilitation
22	Aisha Ahmad Ahmad	BPT (2013); M.Sc. (2018)	Lecturer I	Orthopedics
23	Hauwa Ibrahim Yakasai	BPT (2015); M.Sc. (2018)	Lecturer II	Neurology

5.2. NON- ACADEMIC STAFF OF PHYSIOTHERAPY DEPARTMENT

S/N	NAME	PRESENT RANK/POST
1	Ali Abduwahab Sani	Principal Technical Officer I
2	Sani Garba	Technologist I
3	Fatima Mukhtar	Physiotherapist I
4	Yahuza Muhammad	Chief Typist
5	Ishaq Ibrahim Tahir	Admin Assistant
6	Yazid Muhammad Zakiyyu	Computer Operator I
7	Yusuf Ibrahim	Clerical Officer
8	Mukhtar Idris Garba	Messenger Cleaner
9	Ahmad Adamu	Head Cleaner

5.3 LIST OF DEPARTMENTS SERVICING PHYSIOTHERAPY COURSES

S/N	NAME OF DEPARTMENT	REMARKS
1	Mathematical Sciences	100 Level students
2	Biological Sciences	100 Level students
3	Chemistry	100 Level students
4	Physics	100/200 Level students
5	Anatomy	200 Level students
6	Physiology	200 Level students
7	Biochemistry	200 Level students
8	Pathology	200 Level students
9	Psychiatry	200/300 Level students
10	Nursing Sciences	300 Level Students
11	Surgery	400 Level students
12	Pharmacology and Therapeutics	400 Level students
13	Haematology	500 Level students
14	Chemical Pathology	500 Level students
15	Dermatology	500 Level students