STUDENT'S HANDBOOK

DEPARTMENT OF OPTOMETRY

SCHOOL OF HEALTH TECHNOLOGY

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI

OCTOBER, 2010

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FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI

October, 2010

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FOREWORD

This departmental handbook has been produced for two main reasons:- (i) To ensure that students, staff and other interested members of the public are well informed about the Optometry programme in the Federal University of Technology, Owerri. (ii) To introduce some 'must know' academic regulations to our undergraduate students. These "must know" will guide the students to the successful completion of his/her academic programme without running into any problems in this university.

The Department of Optometry started off in the Department of Optical Technology, which was one out of the five (5) Departments that made up the School of Health Technology at its inception in 2002. The other Departments were :- (i) Physiotherapeutic Technology now Biomedical Technology (ii) Dental Technology (iii) Prosthesis & Orthopedics Technology and (iv) Public Health Technology.

From the beginning, Optometry is classified as a noble profession, due to the fact that one of its well known artifact, the spectacle, was worn in the early centuries mainly by members of the aristocratic family, the rich and the affluent. Indeed, spectacles were regarded as part of jewelries in the early centuries. But today, Optometry has evolved beyond this concept as its areas of interest now include but not limited to :- (i) Ocular Health (ii) Contact Lenses (iii) Low Vision and Rehabilitative Optometry (iv)

Primary Care Optometry (v) Pediatric/Geriatric Optometry (vi) Public Health Optometry and (vii) Orthoptics.

Thus, Optometry has continued to break new grounds in its quest to serve mankind more effectively in the field of vision science and eyecare. In other words, it is one of the fastest emerging new frontiers in the areas of scientific research and education in vision science and eyecare.

In consonance with the Federal University of Technology, Owerri motto of 'Technology for Service,' this Department is totally committed to the development and employment of the latest, available, affordable and adaptable cutting-edge technology in the prosecution of its Optometry programme. In so doing, the Department has pledge to uphold the highest ethical standards required in healthcare training and research, in line with the global best practices.

Finally, every student is advised, not only to obtain a copy of this handbook, but also to study it very carefully. This will enable the student avoid the pitfall(s) that may deny him or her this University's education. It is a privilege to be here.

Dr. Emma C. ESENWAH
Ag. Head of Department
October, 2010

ACADEMIC REGULATIONS
FOR UNDERGRADUATE STUDENTS

SECTION 1:
REGISTRATION AND MATRICULATION

a) Each student shall be required to present himself for registration for the programme of study for which he has been accepted in accordance with the procedure approved from time to time by the University.

b) **Registration Period:**

i) Registration for various courses under each programme shall take place twice per session at the beginning of the Semester. Registration shall end four (4) weeks from the date the registration begins. Students shall return registration forms to their Heads of Department not later than 20 working days from commencement of Semester. Students who return their forms later than this date shall be liable to late registration fee of N5000 or as may be determined by Senate from time to time.

ii) Late registration may be allowed only in exceptional cases with the special permission of the Registrar in consultation with Schools upon the payment of a fee of N5,000. No late registration shall be allowed more than six weeks after lectures begin.

iii) If some genuine reasons, a student is not able to return to the campus to register within the period stipulated, the registrar must be notified immediately in writing. Approval for such late registration shall be given by

the Senate. In exceptional cases the Vice-Chancellor may act on behalf of the Senate. In such a case, the student will pay N5,000.

iv) All completed registration forms shall reach the Deans of Schools not later than six weeks after commencement of Semester.

v) Students shall not be permitted to attend classes or laboratory or to use the University Library or any other facilities of the University after six weeks if he had not completed registration.

vi) Any student who fails to meet the registration requirements shall be deemed to have voluntarily withdrawn from the University.

c) Registration Procedure

a. Freshmen shall on arrival proceed to a designated Bank and pay a prescribed non-refundable acceptance fee into FUTO School fees account and collect Bank Teller which should be exchanged at the bank with a FUTO receipt.

b. Candidates proceed to the Registry (Admissions Unit) for collection of Admission Acceptance Form and Validity Forms.

c. Candidates proceed to the Department where admission has been offered to them with:

i) University official receipt for payment of Acceptance fee.

ii) Originals and photocopies of all credentials claimed (WAEC/NECO, ND etc) together with a copy of birth certificate or statutory declaration of age and certificate of Local Government of origin.

iii) Student collect clearance Form (6) from their respective

Departments. Those whose Clearance Forms were not approved by the Department should proceed to the Registry (Admissions Unit) for change of Department, subject to payment of an application fee of five thousand naira (N5,000.00) only. Such candidates are advised not to pay any other fee until alternative Course/Department is secured for them. Note that candidates who are not registrable in any Department will forfeit the admission.

d) Registration of courses is on-line after purchase of scratch card from designated banks.
   i) Students in the school of Engineering and Engineering Technology (SEET) and School of Management Technology (SMAT) should log in to www.myfuto.com to register on-line.
   ii) Students in School of Agriculture and Agricultural Technology (SAAT), School of Science (SOSC), **School of Health Technology** (SOHT) and postgraduate school are to log in to **www.futoeduportal.com.**

e) Students proceed to the designated points in their respective Schools/Departments to submit copies of their Clearance forms (Form 6), credentials and payment receipts.

f) Fill all forms in the students registration folder (Green File) and submit same to the respective school Administrative Officers not later than two (2) weeks from the beginning of the registration exercise. Candidates are required to also download their on-line registration and submit same to their respective Heads of Department.

g) **Matriculation Procedure:**

i) All new students who have completed registration and fulfilled their financial obligations are formally admitted into the University at Matriculation. Nobody may claim to be a student of this University until he has duly completed all matriculation formalities including issuance of identity cards, which must be effected by the Registrar before the Harmattan Semester Examinations. ii) No matriculated student of this University shall re-present himself for subsequent matriculation.

iii) Any student who is absent from Matriculation shall submit an application to the registrar for deferment of Matriculation. In case of ill-health, this shall be supported by a valid medical report from an approved Medical Officer and certified by the Director of Health Services.

iv) Only matriculated students may with the approval of the Senate, defer their admission.

v) All the processes of admission and registration shall end at matriculation.

h) **Statement of Undertaking:** All students shall sign a statement of undertaking at registration that they will comply with the regulations of the University. The undertaking Form should be processed for stamp-duty at the sub-treasury by the student himself.

i) **Loss of Identity Card:** A student who loses his identity card must inform the Registrar immediately in writing. A duplicate identity card shall be issued on payment of a fee of five hundred naira (₦500.00) only, or as may be approved.

SECTION 2:

ADDING AND DROPPING OF COURSES

a) **Adding of Courses:**

Students may be permitted to add course not later than four weeks after lectures have started for the Semester. Approved forms should be obtained from and returned to the Registrar after they have been signed by the Dean and the Head of Department.

b) **Dropping of Courses:**

Students may be permitted to drop courses not later than four weeks after lectures have started for the Semester. Approved forms should be obtained from and returned to the Registrar after they have been signed by the Dean and the head of department.

SECTION 3:

INDEBTEDNESS TO THE UNIVERSITY

a) The use of University facilities shall be withdrawn from any student who is indebted to the University. Facilities include all forms of academic instruction and supervision, the University Library and residential accommodation owned/or administered by the University.

b) Except with the permission of the Vice-Chancellor, no student who is indebted to the University shall be allowed to continue his registration in the University unless such indebtedness is cleared.

SECTION 4:

CLASS PERIOD AND ATTENDANCE

4.1. Duration of Classes:

Classes are expected to being on the hour and to end 10

minutes before the next hour. Seminars, Tutorials, Laboratory practicals and workshops shall however continue as long as scheduled.

4.2. **Class Attendance:**

Only a student who has been properly registered for a course and whose name appears on the official class list for that course shall be allowed into a class. Students are expected to attend all classes for courses which they registered. Attendance at classes, laboratories, and other practical is compulsory.

4.3. **Absence from Classes:**

If a student is absent from prescribed instructions for more than three weeks or during any one Semester, that Semester may not (except with the permission of 25% of the Senate or the Vice-Chancellor acting on behalf of the Senate) be included as part of the scheme of study which the student is required to complete.

4.4. **Class Period and Qualification for Examination:**

Only students who record at least 75% attendance on a given course are qualified to write the examination on the course.

SECTION 5:

WITHDRAWAL FROM THE UNIVERSITY

a) **Voluntary Withdrawal:**

i) Students who wish to withdraw from the University shall notify the Senate in writing through the Dean of the School and the Head of Department. The period of withdrawal shall not exceed one academic year and shall be subject to approval by the Senate.

ii) For fresh students, the written notice of withdrawal

shall be given not later than four weeks after matriculation. For other students, the notice shall be given not later than four weeks after the beginning of the Semester.

iii) Any Student withdrawing from the university shall be required to complete a form giving a brief statement of the reason and the effective date of leaving. The form shall be obtained from the Registrar.

iv) Such a student may retain grades earned for the Semester examinations preceding the date of voluntary withdrawal.

v) Students who so voluntarily withdrew from the University shall, n order to be re-admitted be required to send a formal application to and receive official clearance from the Senate.

vi) Senate may prescribe conditions, which shall be fulfilled before students may resume their programme of studies after their period of voluntary withdrawal.

b) **Unauthorized Withdrawal:**

Students who withdraw from the University without authorization may not be considered for re-admission until their cases have been dealt with on their individual merits by the Senate.

c) **Withdrawal for Academic Reasons:**

All students who are admitted into the University are expected to maintain acceptable standards of academic performance. Every student is also expected to maintain a minimum Grade Point Average for his/her year of study. Specifically, the Registrar shall send a letter of warning to any student who obtains a Cumulative Grade Point

Average of less than 1.00 in the first instance. Thereafter any such student shall be asked to withdraw from the University if his/her Cumulative Grade Point Average continues to be less than 1.00. However, in order to minimize waste of human resources, consideration should be given to withdrawal from programme of study and possible transfer to other programmes within the University.

d) **Withdrawal for Health Reasons:**
A student may withdraw or be asked to withdraw for health reasons certified by the Director of Health Services of the University. Such a student shall be re-admitted into the University on production of a valid medical report from an approved Medical Officer, and certified by the Director of Health Services.

e) **Disciplinary Withdrawal:**
Students who are suspended on disciplinary grounds may not be re-admitted unless with the express permission of the Senate or the Vice-Chancellor acting on behalf of the Senate.

f) **Financial Obligation after Withdrawal:**
Students who withdraw from the University for any reasons and who are not re-admitted within a period of two consecutive academic sessions from the date of their withdrawal, may not be re-admitted into the University.

SECTION 6:
INTER UNIVERSITY TRANSFERS

a) The University shall not normally grant Inter University Transfer. However, in exceptional cases inter university

transfer admission may be granted by the expressed approval of the Senate. A minimum CGPA of 3.5 on a 5 point scale is required in addition to meeting the departmental admission requirements.

b) Such transfer admissions shall be processed on the prescribed forms, through the Department, the School and the Registry to the Senate.

SECTION 7:
CHANGE OF DEPARTMENT

a) Applications for change of Department shall not normally be granted. However, in exceptional cases change of department may be allowed with approval of the Senate. A minimum CGPA of 3.5 on a 5-point scale is required in addition to meeting the departmental admission requirements. Official application forms for any change of department shall be obtained from the Registrar, and processed through the Department and School to the Senate.

b) Courses taken in the former department which are relevant to the new programme shall be credited to the student. The remaining course shall appear in the student's official academic records but shall not be taken into account in determining the student's Cumulative Grade Point Average for graduation.

SECTION 8:
ACADEMIC PROGRAMMES

a) **Structure:**

i) Programmes of courses leading to the award of

Bachelor's degrees shall be provided in each School and Department.

ii) Instructions shall be by the course unit system. A course unit is defined as series of one hour lecturers or a series of forty-five hour laboratory work, or any equivalent work load, offered over one Semester of about 15 weeks.

iii) The following terms shall apply in evaluation:-
Grade Point (GP): The grade Point derives from the actual percentage or raw score for a given course, the raw score is converted into a letter grade ranging from A to F and grade point ranging from 5 to 0 as shown in section 21.1.

iv) Total Grade Point (TGP): This is derived from multiplying the grade point by the units per course and summing up the grade points for all the courses registered.

b) Total Number of Units (TNU): This is obtained by adding up all the units taken by the student in the Semester.

c) Grade Point Average (GPA): Performance in any Semester is reported as a Grade Point Average. This is the average of weighted grade obtained by dividing the TGP by the TNU.

d) Cumulative Grade Point Average (CGPA): This is the up-date average of the Grade Points earned by the student in programme of study. It is an indication of the student's overall performance at any point in the programme. To compute the CGPA, the TGP's for all the Semesters are

added then divided by the TNU's for all courses registered by the student.

There shall be five levels of undergraduate courses coded as follows:-

1st Year:	101 -	199
2nd Year:	201 -	299
3rd Year:	301 -	399
4th Year:	401 -	499
5th Year:	501 -	599

Course codes shall be prefixed with letters signifying the programme. As a rule, Harmattan Semester course codes end in odd numbers while Rain Semester course codes end in even numbers.

i) A student shall normally be required to register for and take a minimum of 15 units and a maximum of 21 units during each semester. However, in exceptional cases, three additional units above the present maximum of 21 units may be approved as follows:

ii) A student with CGPA of not letter than 3.00 may register up to a maximum of 24 units per Semester on the approval of the School Board of Studies. Such approval shall be processed to the Senate for ratification.

iii) A graduating student may register up to a maximum of 24 units per Semester on the approval of the School Board. Such approval shall be processed to the Senate for ratification.

iv) Appropriate pre-requisite and/or concurrent courses may be waived for suitably qualified candidates only by the Senate on the recommendation of the appropriate School Board of Studies.

v) Each course shall be examined at the end of the Semester in

which the course is completed. Any deferment shall be by the approval of the Senate on the recommendation of the School Board of Studies concerned. At the end of each course, a candidate shall be credited with the number of units assigned for each course taken and passed.

e) **Duration of the Degree Programme:**

i) Unless otherwise permitted by the Senate, a student shall complete a Bachelor's Degree programme in not less than ten Semesters and not more than fourteen Semesters, from the date of first registration in the University. Any period of authorized withdrawal shall not be included. These provisions shall not apply to transfer students from other Universities, or to students admitted by direct entry unless directed by the Senate.

ii) A degree certificate shall bear date on which the Senate approved that the student has completed the requirements for the award of the degree.

iii) A transfer student with advanced standing shall be required to spend not less than three academic sessions (6 Semesters) in the University to be eligible for a degree. These courses required for the graduation of such a transfer student shall be duly approved by the Senate on the recommendation of the appropriate School Board of Studies.

SECTION 15:
ADMISSION OF STUDENTS TO EXAMINATIONS

a) In order to be admitted to any Examination, a student must have been registered for the course to be examined and

must have fulfilled all University requirements concerning residence, fees and other matters.

b) The students must also have fulfilled all University requirements regarding attendance and satisfactory completion of course-work, practical, projects, and other assignments.

c) All students have the responsibility to be present for the examination in each course for which they have registered. It is the duty of each student to know the date, time and place of each examination.

d) Any student that does not meet the requirements specified in 15(a) and 15(b) above shall not be allowed to take the examinations.

SECTION 16:
DEPARTMENTAL EXAMINATION OFFICERS

a) **Appointment:**
There shall be an Examination Officer each Department.

b) **Duties:**
The Departmental Examination Officer shall carry out the following duties as may be directed by the of Department/Chief Examiner.

i) Supervision of the typing and duplication of examination papers.

ii) Collection of the live question papers from the Head of Department.

iii) Making available the question papers at the right time during examinations.

iv) Collection of answer scripts after the examination and keeping them until they are collected by the individual

lecturer.

v) Collection of the results submitted by the individual lecturers for presentation at the Departmental Board meeting.

vi) Assisting in the preparation of the final result for presentation to Senate through the School Board of Studies.

SECTION 18:

INSTRUCTIONS TO CANDIDATES

a) Candidates shall be in the examination venue thirty (30) minutes before the starting time of the examination.

b) No candidate shall normally be allowed to enter the examination venue thirty (30) minutes after the starting time of the examination.

c) If a candidates is obliged to leave the examination room for personal reasons, he or she must be accompanied by an invigilator or other authorized person.

d) (i) Candidates may not hand in papers or make a final exit from the examination room before the expiration of one hour from the starting time of the examination.

ii) No candidates will be allowed to leave during the last fifteen (15) minutes of the examination; iii) In withdrawing from the examination room before the end of an examination, a candidate must exercise great care not to disturb other candidates.

iv) Candidates shall not be allowed to return to the examination room after handing in their papers.

e) (i) Before the commencement of a paper, each candidate

must first complete the essential details on the front of their examination booklet.

ii) If further examination books and or/sheets are used (e.g. graph papers, drawing paper) candidates must ensure that their registration numbers and subjects are entered on each book or sheet etc., and that the examination books and sheets are securely fastened together.

iii) Candidates shall use their registration numbers as examination numbers.

iv) Candidates shall write their registration numbers on all answer sheets.

v) Every candidate shall sign the Attendance Register during the examination (both at the beginning and the end). No candidate shall leave the examination room without completing the register.

vi) Identity cards shall be produced for inspection by all candidates.

f) If a candidate brings to the examination room any notes, drawing, tracing books or instruments other than those specifically permitted for his subject, he or she must at once give them up to the invigilator. Bags shall be left at one end of the examination room in accordance with the directions of the invigilator.

g) No scribbling paper, or any thing that might be passed from one candidate to another is allowed. Rough work and calculation must be done on the answer papers, the pen being drawn through them to show that they are not part of the answer papers.

h)(i) A candidate must not, on any pretext whatsoever

speak or have any communication with another candidate.

ii) If a candidate requires to ask a question, he or she should attract the attention of the invigilator by raising of the hand.

iii) Candidates must not behave in such a manner as to disturb other candidates.

i) Smoking shall not be permitted in the examination rooms.

j) Any form of cheating in any examination shall lead to disciplinary action.

k) At the conclusion of the examination, candidate shall remain seated until all completed scripts have been collected, or as otherwise instructed by the Chief invigilator.

SECTION 20:
ABSENCE FROM EXAMINATION

a) Candidates must present themselves for such University Examination in courses which they have registered under these regulations. Candidates who fail to do so for reasons other than illness or accident shall be deemed to have failed the examination.

b) Misreading of the examination time-table shall not be accepted as a satisfactory explanation for absence.

c) Whenever a student is prevented by ill-health from taking an examination, the candidate shall notify the Registrar through an application in writing through the Head of Department and the Dean of the School and shall submit a medical certificate issued/or validated by the Director of

Health Services of the University within one month of the examination.

d) Such an application shall be processed to the Senate through the relevant Departmental Board of Studies and School Board of Studies. Where successful, the Senate may approve that the student take the examination at the next available opportunity as a first attempt.

SECTION 21:

EXAMINATION RESULT

a) Performance in a course shall be recorded in letter grades (after due conversion from percentage scores) as follows:-

% Score	Grade	Grade Point Equivalent
70-100	A	5 Excellent
60-69	B	4 Very Good
50-59	C	3 Good
45-49	D	2 Pass
40-44	E	1 Poor Pass
0-39	F	0 Failure

b) Each of the letters is the equivalent of the grade point as indicated above. Where special weight is given to work done during each Semester, this must be based on formal examination written, oral or practical or on the assessment of work approved by the Board of Examiners and not mere attendance at lectures or the assessment by the lecturer without examination.

For courses with laboratories the weighting shall be:-

Examination 60%

Continuous Assessment (CA)..... .....40%

For courses without laboratories the weighting shall be:-

Examination..... 70%

Continuous Assessment (CA)..... 30%

c) The number of grade points for each course completed by a student is computed by multiplying the number of units for the course by the grade point equivalent he/she obtained in the course. See also Section 8(ii).

d) When the grade points for all course units at each level of courses have been assembled, the student's cumulative grade point average (CGPA) is calculated by dividing the total number of his grade points by the total number of units taken. See also section 8(ii).

e) The minimum pass mark shall be 40% (E) for all courses.

f) All the degree courses (required, restricted elective, unrestricted elective and General Studies) undertaken by a student as well as the successful completion of Industrial Attachment shall count towards the evaluation of his or her degree.

The Class of Degree shall be determined as follows:-

Class of Degree	Cumulative	Grade Point
1st Class Honours - -	4.50	- 5.00
2nd Class (Honours) Upper Division-	3.50	- 4.49
2nd Class (Honours) Lower Division-	2.40	- 3.49
3rd Class Honours - -	1.50	- 2.39
Pass - -	1.00	- 1.49
Fail - -	0.00	- 0.99

SECTION 24:
REVIEW OF ACADEMIC PROGRESS

24.1.Students shall be permitted to proceed with their programmes of study only if their progress is satisfactory.

24.2. The progress of each student shall be reviewed at the end of each session. Any student with CGPA of less than 1.00

shall in the first instance be issued a letter of warning by the Registrar. Thereafter, any such student shall be asked to withdraw from the University if his/her cumulative grade point average continues to be less than 1.00.

SECTION 25:

PROCEDURE FOR THE REVIEW OF SCRIPTS OF AGGRIEVED STUDENTS

25.1. Students aggrieved about their grading shall in the first instance petition the Registrar through the Head of Department. The Registrar shall refer such a petition to the relevant School Board of Studies through the Dean of the School offering the course for a review.

25.2. The recommendations of the School Board of Studies shall be sent to the Senate.

25.3. Students applying for a review of answer scripts shall be required to pay a fee which shall be subject to review from time to time by the Senate.

25.4. The script shall be sent for reassessment to internal and external examiners drawn from persons who had not participated in the original marking exercise.

25.5. Where a student is required to withdraw from the University in accordance with Section 24 above and petitions for a review of his scripts, the order requiring him to withdraw shall continue to be effective unless the result of the review is favourable.

SECTION 26:

EXPULSION FROM THE UNIVERSITY

26.1. Any student who has been found guilty of involvement

in any case of gross misconduct, such as (but not limited) to examination misconduct, convicted felony of other cases of criminal offences, association with or membership of secret cults or of any organization proscribed by the University or the Government shall on approval of the Senate and without prejudice to section 16 of the Federal University of Technology, Owerri, Law be:-

i) Expelled from the University and

ii) Handed over to the police for prosecution under the appropriate Laws/Decrees.

26.2. PUNISHMENT FOR VARIOUS EXAMINATION MISCONDUCT

Any student who has been found guilty in any of the examination misconduct listed hereunder shall on approval of the Senate and without prejudice to Section 16 of the Federal University of Technology, Owerri, Law serve the corresponding punishment as follows:-

S/N	NATURE OF OFFENCE	PRESCRIBED PUNISHMENT
a.	Any student caught with a piece of paper GSM phone or gadgets containing relevant information pertaining to the examination.	Rustication for one (1) academic session.
B.	Second offender for one above.	Expulsion
c.	Impersonation during examination	Expulsion of the student (s)
d.	Fighting Examination Supervisor, invigilator, etc.	Expulsion.
E.	Unauthorized handling of examination question papers.	Expulsion
f.	Exchange of Answer booklets.	Rustication for one academic session
g.	Exchange of material in examination hall	As above.
h.	Collaborative copying	Rustication for one academic session. Expel at a repeat of the offence.

i.	Smuggling of question paper in or out of the examination hall	Rustication for one academic session
J.	Refusal to appear before a panel	Rustication for one academic session
k.	Forging/altering result grades and signature of officials.	Expulsion
L.	Coming into the hall with a gun or any other dangerous weapon.	Expulsion.
m.	Threatening a staff or members of their families verbally or in writing.	Expulsion.
n.	Procuring and altering a medical certificate in order to obtain a deferment of examination	Rustication for one academic session.
O.	Sorting/alteration of examination grades by whatever means.	Rustication for one academic session.
P.	Submission of forged registration materials, including add/drop card.	Rustication for one Academic session.

SECTION 27:
AWARD OF DEGREES/DIPLOMAS

27.1. Degrees/Diplomas of the Federal University of Technology, Owerri shall only be awarded to candidates who by the authority of the Senate, have been found worthy in character and in learning for the award of such degrees/diploma.

27.2. To be found worthy in learning, a candidate must have successfully completed and passed all the prescribed examinations and courses of instruction required for such degree/diploma, within the stipulated time, or as the

Senate may otherwise prescribe.

27.3. Students who have been found involved in cases of gross misconduct, such as (but not limited to) examination misconduct, convicted felony or other cases of criminal offences, association with or membership of secret cults or of any organization proscribed by the University or the Government, shall, by the authority of the Senate, NOT be worthy in character for the award of a degree/diploma of the Federal University of Technology, Owerri.

DRESS CODE:

All students of the Department of Optometry MUST be decently dressed especially to lectures. Indecent dressing, including exposure of body, attracts serious disciplinary actions.

All students MUST use approved Laboratory coats and clinical rackets for practicals and clinics respectively. They MUST also obtain any safety wears recommended by the Department for practicals and field trips.

BEHAVIOUR/CONDUCT OF STUDENTS:

Falsification of credentials, results or membership of any secret cult attract the de-registration of the affected student and the case reported to higher Authorities for further disciplinary actions.

Any established case of sexual harassment on a student by a fellow student or lecturer or on a lecturer by a student, should be reported immediately to the Head of Department for appropriate disciplinary actions.

PROGRAMME

OPTOMETRY

INTRODUCTION/DEFINITION:

Optometry is a healthcare profession that is autonomous, educated and regulated. The Optometrist, as its practitioner is called, is a primary healthcare practitioner of the eye and visual system, who provides comprehensive eye and vision care services which include refraction and dispensing, the detection/diagnosis and management of disease in the eye and rehabilitations of conditions of the visual system (World Council of Optometry, W.C.O.).

PHILOSOPHY: To facilitate the enhancement and development of eye and vision care through exemplary leadership in training, practice and research.

MISSION: To produce a total Optometrist that is resourceful, knowledgeable and skilful in the creation and use of technologies for the amelioration of visual defects.

VISION: The vision of this Department is to employ the latest cutting-edge technology in the training of highly skilled, knowledgeable and research oriented Optometrists that will be of great service to mankind.

DURATION OF STUDY: Optometry is a 6-Year programme leading to the award of the Doctor of Optometry(O.D.) degree.

OBJECTIVES:

The objectives of this programme include:-

i. To produce Doctors of Optometry with sound knowledge of the profession, its ethics and codes of conduct.
ii. To produce Optometrists who will provide the much needed manpower in the eye care industry.
iii. To produce Optometrists that will meet internationally recognized standards and undertake training towards post-graduate specialization.
iv. To train and cultivate in them the ability to teach, conduct research and make advances in the profession for the benefit of mankind.

CAREER OPPORTUNITIES:

Career opportunities are available in Private Practice, Public Service, Armed Forces, Police and Allied services, International Organizations/NGOs, Research and Educational Institutions.

ADMISSION REQUIREMENTS:

1. **UME ENTRY:**

   In addition to an acceptable pass in UME (combinations of Biology, Chemistry, Physics and English language), the candidate must have:

   a) Senior secondary school certificate credit passes in five subjects, which include English Language, Mathematics, Physics, Chemistry and Biology at not more than two sittings.

   b) Five WASC/GCE O'level as in (a) above.

2. **DIRECT ENTRY:**

   a) WASC/GCE A' level passes in Physic, Biology and

Chemistry with SC/GCE O'level credit passes in Mathematics, Physics, Biology Chemistry and English Language at not more than two sittings.

b) Holders of First degree with at least second-class lower division in any Health related course are eligible for admission into 200 level.

c) Holders of HND with minimum of upper credit pass are eligible for admission into 200 level depending on the appropriateness of their requisite academic preparation.

In addition to fulfilling the requirement in (2b & 2c) above, a holder of first degree and HND must also have five GCE O'level credit passes in Mathematics, Physics, Biology, Chemistry and English Language at not more than sittings.

EXAMINATION RESULTS

Without prejudice to **Section 21** of the **Academic Regulations for Undergraduate Students**, the University Senate, at its 336th Meeting held on Thursday, 25th March, 2010, approved **50%** as the **minimum pass mark** for Optometry Courses, in line with professional requirements.

COURSE OUTLINES

100 LEVEL

(UNIVERSITY FOUNDATION YEAR COURSES)

HARMATTAN SEMESTER

S/N	CODE	COURSE NAME	L	T	P	UNIT
1.	MTH 101	ELEMENTARY MATHEMATICS 1	3	1	0	4
2.	PHY 101	GENERAL PHYSICS 1	2	1	1	4
3.	CHM 101	GENERAL CHEMISTRY 1	2	1	1	4
4.	BIO 103	BIOLOGY FOR AGRIC & BIO SCI 1	2	0	1	3
5.	ENG 101	WORKSHOP PRACTICE 1	0	0	1	1
6.	ENG 103	ENGINEERING DRAWING 1	0	0	1	1
7.	GST 101	USE OF ENGLISH 1	1	1	0	2
8.	GST 103	HUMANITIES	1	0	0	1
						20

RAIN SEMESTER

			L	T	P	UNIT
1.	MTH 102	ELEMENTARY MATHEMATICS 11	3	1	0	4
2.	PHY 102	GENERAL PHYSICS 11	2	1	1	4
3.	CHM 102	GENERAL CHEMISTRY 11	2	1	1	4
4.	BIO 104	BIOLOGY FOR AGRIC & BIO SCI 11	1	0	1	2
5.	ENG 102	WORKSHOP PRACTICE 11	0	0	1	1
6.	ENG 104	ENGINEERING DRAWING 11	0	0	1	1
7.	GST 102	USE OF ENGLISH 11	1	1	0	2
8.	GST 110	SCIENCE, TECHNOLOGY, SOCIETY	1	0	0	1
9.	GST 108	SOCIAL SCIENCE	2	0	0	2
						21

200 LEVEL

HARMATTAN SEMESTER

S/N	CODE	COURSE NAME	L	T	P	UNIT
1.	HST 201	HUMAN ANATOMY 1	1	0	1	2
2.	HST 203	GENERAL BIOCHEMISTRY	1	0	1	2
3.	HST 205	GENERAL MICROBIOLOGY	1	0	1	2
4.	GST 201	NIGERIAN & AFRICAN CULTURE	2	0	0	2
5.	CSC 201	COMPUTER APPLICATION	2	1	1	4
6.	PHT 201	HUMAN GENETICS IN HEALTH & DISEASE	1	0	0	1
7.	OPT 201	GENERAL PSYCHOLOGY	3	0	0	3
8.	OPT 203	HUMAN HISTOLOGY	1	0	1	2
						18

RAIN SEMESTER

		L	T	P	UNIT
1. HST 202	HUMAN PHYSIOLOGY 1	2	0	1	3
2. HST 204	MEDICAL BIOCHEMISTRY	1	0	1	2
3. HST 206	MEDICAL MICROBIOLOGY	1	0	1	2
4. HST 208	ORGANIC CHEM. FOR HEALTH PROF.	1	0	1	2
5. PHT 204	HEALTH & HUMAN BEHAVIOR	2	0	0	2
6. OPT 202	HUMAN ANATOMY 11	2	0	1	3
7. OPT 204	INTRO TO OPTOMETRY	2	0	0	2
8. OPT 206	DEVELOPMENTAL & CLINICAL PSYCHOLOGY	3	0	0	3
					19

300 LEVEL

HARMATTAN SEMESTER

S/N	CODE	COURSE NAME	L	T	P	UNIT
1.	HST 301	GENERAL PATHOLOGY	2	0	0	2
2.	HST 303	INTRO PHARMACOLOGY	2	0	0	2
3.	OPT 301	HUMAN PHYSIOLOGY 11	1	0	1	2
4.	OPT 303	OCULAR ANATOMY 1	2	0	1	3
5.	OPT 305	OCULAR PHYSIOLOGY 1	2	0	0	2
6.	OPT 307	PHYSICAL OPTICS	2	1	0	3
7.	OPT 309	GEOMETRIC OPTICS	1	1	0	2
8.	OPT 311	PHYSIOLOGICAL OPTICS 1	2	0	1	3
						19

RAIN SEMESTER

			L	T	P	UNIT
1.	HST 304	STATISTICS FOR HEALTH PROF.	1	1	0	2
2.	OPT 302	OPHTHALMIC OPTICS 1	1	0	1	3
3.	OPT 304	OCULAR ANATOMY 11	2	0	1	3
4.	OPT 306	OCULAR PHYSIOLOGY 11	2	0	1	3
5.	OPT 308	GENERAL PHARMACOLOGY	1	1	0	2
6.	OPT 310	NEURO ANAT & PHYSIOLOGY	2	1	0	3
7.	OPT 312	PHYSIOLOGICAL OPTICS 11	1	0	1	2
8.	ENG 314	ENTREPRENEURSHIP 1	2	1	0	3
						20

400 LEVEL

HARMATTAN SEMESTER

S/N	CODE	COURSE NAME	L	T	P	UNIT
1.	OPT 401	OCULAR PATHOLOGY 1	1	1	0	2
2.	OPT 403	OCULAR PHARMACOLOGY	2	0	0	2
3.	OPT 405	GENERAL OPTOMETRY 1	0	1	0	2
4.	OPT 407	OPHTHALMIC OPTICS 11	2	0	0	2
5.	OPT 409	CONTACT LENS 1	1	0	1	2
6.	OPT 411	GEN OPTOMETRY LAB	0	0	3	3
7.	HST 401	HEALTH INFOR & MGT SYSTEM	2	1	0	3
8.	HST 403	RESEARCH METHODS & TECH.	2	1	0	3
						19

RAIN SEMESTER

			L	T	P	UNIT
1.	OPT 402	PHYSIOLOGICAL OPTICS 111	2	0	1	3
2.	OPT 404	GENERAL OPTOMETRY 11	2	0	2	4
3.	OPT 406	CONTACT LENS 11	2	0	2	4
4.	OPT 408	OCULAR PATHOLOGY 11	1	1	0	2
5.	OPT 410	OPTOM. INST/MAINTENANCE	1	0	1	2
6.	OPT 412	EPIDEMIOLOGY	2	0	0	2
7.	OPT 414	ANOM. OF BINOCULAR VISION	1	1	0	2
						19

500 LEVEL

HARMATTAN SEMESTER

S/N	CODE	COURSE NAME	L	T	P	UNIT
1.	OPT 501	DISPENSING OPTICS 1	1	0	1	2
2.	OPT 503	LOW VISION & OCULAR PROSTH	1	0	1	2
3.	OPT 505	ADVANCED CONTACT LENS PRACTICE	1	0	1	2
4.	OPT 507	PHYSIOLOGICAL OPTICS IV	2	0	1	3
5.	OPT 509	ORTHOPTICS	1	0	1	2
6.	OPT 511	OCULAR PATHOLOGY 111	2	0	1	3
7.	OPT 513	CLINICAL PROCEDURE/PRACTICE	2	0	2	4
8.	MEE 503	ENTREPRENEURSHIP 11	1	0	0	1
						20

RAIN SEMESTER

			L	T	P	UNIT
1.	OPT 502	DISPENSING OPTICS 11	1	0	1	2
2.	OPT 504	GERIATRIC OPTOMETRY	2	0	0	2
3	OPT 506	PEDIATRIC OPTOMETRY	2	0	1	3
4.	OPT 508	PRACTICE MANAGEMENT	2	0	1	3
5.	OPT 510	VISUAL ANALYSIS	2	0	1	3
6.	OPT 512	ENVIRONMENTAL VISION	1	0	1	2
7.	OPT 514	CLINICAL PROCEDURES/ PRACTICE	2	0	2	4
8.	MEE 504	ENTREPRENEURSHIP 111	1	0	0	1
						20

600 LEVEL

HARMATTAN SEMESTER

S/N	CODE	COURSE NAME	L	T	P	UNIT
1.	OPT 601	CLINICAL PROCEDURE/PRACTICE	0	0	6	6
2.	OPT 603	OCULAR PHARM, THERAP & TOXIC	2	1	0	3
3.	OPT 605	ETHICS & JURISPUDENCE	2	1	0	3
4.	OPT 607	EXTERNSHIP	0	0	4	4
5.	OPT 609	SEMINAR ON RESEARCH TOPICS	0	0	2	2
						18

RAIN SEMESTER

			L	T	P	UNIT
1.	OPT 602	CLINICAL PROCEDURE/PRACTICE	0	0	6	6
2.	OPT 604	HOSPITAL PRACTICE	1	1	0	2
3.	OPT 606	EXTERNSHIP	0	0	4	4
4.	OPT 608	THESIS	0	0	6	6
						18

COURSE DESCRIPTIONS

100 LEVEL

UNIVERSITY FOUNDATION YEAR COURSES

GST 101: USE OF ENGLISH I (1,1,0) 2 CREDITS

Use of Library. Use of words and sentence construction. Functions of sentences, purpose structure, and correct use of verbs (action words), word order and punctuation. Essay/Composition Writing, Paragraphs - structure, function, links and style. Exposition description and explanation. Special types of exposition, e.g. letter writing layout of a business letter, technical reports including terms of reference, drafting and editing of reports.

GST 102: USE OF ENGLISH II (1,1,0) 2 CREDITS

Comprehension and interpretation reading efficiency of technical and non-technical material. Note taking; techniques of note taking from lectures, precise-writing or summarizing methods, technical vocabulary, word formation, use of classical terms and affixes, special terms, acronyms, new words, definitions, basic words in the fields of specialization, e.g. mechanical, electrical, civil, aeronautical, automobile engineering, metallurgy, mathematics.

GST 103: HUMANITIES (1,0,0) 1 CREDIT

The nature and scope of economics. The Nigerian political system: policy and means of production in Nigeria. The structure of the Nigerian economy aspects of economic and

technological dualism; internal migration rural to urban migration and the informal sector. The role of capital growth and development; public investment criteria; choice of "appropriate" or "relevant" technology. Human resources development in Nigeria labour utilization, education and manpower development and planning. Agriculture in the development process; land tenure and reform, agricultural technology and green revolution and integrated rural development. Industrialization: role and types of industries, choice of techniques, import substitution, and export expansion. The economic role of the government, government expenditure and taxation; the federal structure, fiscal federalism and revenue allocation; the financial system, problems of development planning and plan implementation in the federal system of government, prospects of the Nigerian economy.

GST 108: SOCIAL SCIENCES (1,0,0) 1 CREDIT

Introduction: the nature and scope of politics and economics. Definition of basic concept in economics and political science.

Nigeria's public sector: The political set up in Nigeria. The civil service structure, Public investment and economic infrastructure. The economic role of the government: government expenditures and revenues, fiscal federalism and revenue allocation.

Nigeria's private sector: The financial system in Nigeria. The role of the agricultural sector in the development process. The industrial sector and public investment in Nigeria. Human and prospects, aspects of economic and technological dualism. Political and economic future of Nigeria. A global perspective of economics; economic system and developing nations'

economies. International trade and development; balance of payments, commercial policies of Nigeria and other developing countries. Economic integration; state and structure of economies of ECOWAS countries, the ECA and Economics Co-operation in Africa. Foreign aid and investments: The multinational corporations, technological transfer and technological dependence. Global interdependence and new international economic order. World economic crisis-energy and OPEC, food storage and armament.

GST 110: SCIENCE, TECHNOLOGY & SOCIETY (1,0,0) 1 CREDIT

The Scientific Evolution of Man Science, need for science, history of science, classifications, modern scientific methods; Science and Man's environment Terrestrial and cosmic life; Harnessing science climate and vegetation. Production, processing conservation, distribution; Energy resources solar thermal, nuclear energy fossil fuels, estimates of energy reserves in Nigeria. Key revolution in technology, technology, electronics and computer technology, robotics and cybernetics, every day applications; technology history of technology evolution/practice in Nigeria, role of technology in the national economy; Education for technology past, present and future; constraint in the use of new technology products reliability, quality control, cost effectiveness, politics and environment; effects of mechanization, consumerism, Social implications of scientific advances science in the civilization of man, science and culture, society social of scientific advances e.g., displacement of man by machines, space travels, threat of

nuclear and neutron war, genetic research, energy crisis; Ethics in technology ethics, professionalism, legal aspects.

MTH 101: ELEMENTARY MATHEMATICS (3,1,0) 4 CREDITS

Numerical systems. Indices, surds and logarithms, polynomials, remainder and factor theorems. Polynomial equations. Rational functions, partial fractions, fields. Ordered fields. Inequalities. Mathematical induction. Permutations and combinations. Binomial theorem. Sequences and series. The quadratic equation and function. Relation between the root and the coefficients. Complex numbers. Addition, subtractions, multiplication and division. Arg and diagram De-Moivre's theorem, n'th root of complex numbers.

Elementary set theory. Venn diagrams applications. De-Morgan's laws, trigonometry. Elementary properties of basic trigonometric functions addition formulae and basic identities. Sine and cosine formulae, half angle formulae, area of triangle, solution of trigonometric equations, inverse trigonometric functions, functions and concept and notation. Examples composition, exponential and logarithmic functions. Graphs and properties, limits and continuity, techniques for finding limits, the derivatives, calculation from first principles, techniques of differentiation, chain rule, higher order derivatives. Extremum problems mean value theorem, applications, indeterminate forms and L'Hospital's rule, Taylor's and Maclaurin's series, curve sketching, integration as the reverse of differentiation,as area, as limit of finite sums, definite integrals, properties of definite integrals applications.

MTH 102: ELEMENTARY MATHEMATICS II (3,1,0) 4 CREDITS

Transcendental functions, hyperbolic functions, inverse functions, logarithmic differentiation, methods of integration of rational functions, integration by substitution, integration by parts, improper integrals. Applications. Area and volumes, center and mass. Ordinary differential equations. First- order equations with variables separable. First order linear equation. Second order homogenous equations with constant coefficients. Applications. Plane analytic geometry. Rectangular Cartesian co-ordinatates. Distance between two points. The straight line. Loci. The circle, parabola. Ellipse and hyperbola. Second degree curve. Plane polar co-ordinate systems. Graphs of polar equations. Plane areas in polar coordinates. Vectors. Vector functions and their derivatives. Velocity and acceleration. Matrix algebra. Addition and multiplications. Transpose. Determinants. Inverse of non-singular matrices. Crammers rule and application to the solution of linear equations, (Examples should be limited to m x n matrices where m = 1,2,3, etc). Transformation of the plane. Translation, reflection, rotation, enlargement. Composition of transformations.

PHY 101: GENERAL PHYSICS 1 (2,1,1) 4 CREDIT S

Mechanics: spaces and time units and dimensions; vector; kinematics', Newton's law; Galileo invariance, statics and dynamics of particles; universal gravitation, work and potential energy, conservation of energy and momentum; rigid bodies, fluid mechanics. Thermal properties, including elementary thermodynamics and kinetics theory

PHY 102: GENERAL PHYSICS 11 (2,1,1) 4 CREDITS

Electricity and Magnetism: electrostatic; conductors and currents; dielectrics; magneticss fields and induction; Maxwell's equations; electromagnetic oscillations and waves. Geometrical optics: Geometrical methods applied to the optics of mirrors, lenses and prisms.

CHEM 101: GENERAL CHEMISTRY 1 (3, 0,1) 4 CREDITS

Atomic structure and the periodic classification of the elements, ionic and covalent bonding including the effect of dipole-dipole interacting of physical properties. Redox reactions and the concept of oxidation number, introduction to gas kinetic, introduction to nuclear chemistry. Solid and lattice structure, acid -base reaction; general principle of extraction of metals.

CHEM 102: GENERAL CHEMISTRY II (3, 0, 1) 4 CREDITS

Physical and chemical equilibrium, elementary electrochemistry and chemical kinetics. Survey of reaction group in aliphatic and aromatic compound. Concept of hybrid bonds. Alkane, alkene, alkyne reaction of alcohol and alkyl. Halides; addition and elimination reaction of carbon multiple bond, elimination and substitution in benzene; hydroxyl group and carbonyl compound, organic acid bases and derivatives.

BIO 103: BIOLOGY FOR AGRIC AND BIOLOGICAL SCIENCE (2, 0,1) 3 CREDITS

Scientific methods and the characteristics of living and non living things. Cell and tissues biology. Elements of biological chemistry and cellular metabolism. Taxonomy of living things. Heredity and evolution. Element of ecology and types of

habitats.

BIO 104: BIOLOGY FOR AGRIC. AND BIOLOGICAL SCIENCE II (2, 0,1) 3 CREDITS

Scientific methods and the characteristics of living and non - living things. Cell and tissue biology. Elements of biological chemistry and cellular metabolism. Taxonomy of living things. Heredity and evolution. Elements of ecology and types of habitats. Not available.

ENG 101: WORKSHOP PRACTICE I (0, 0, 1) 1 CREDIT

General: use of engineering measuring instruments- calipers e.g. venire calipers; gauges e.g. micrometer screw gauges and other devices. Introduction to hand tools, proficiency in the use of wood planner, hand saw, sander and pattern making.

Sheet metal work: production of sheet metal products layouts, cutting, shaping, simple bend theory etc

Introduction to joining techniques; soldering, brazing, fusion welding, fastening and assembly. Basic wood working principles and tools finishing and evaluation of finished products.

ENG 102: WORKSHOP PRACTICE II (0, 0,1) 1 CREDIT

Industrial safety: safety code of conduct and safety consciousness. Survey of common sources of accidents in the work place. Accident prevention and control.

Machine shop work; working components in the lathe machine, instructions in simple metal working processes e.g shaping, milling, grinding, reaming, metal spinning, design of jigs and fixtures. Introduction of automation in manufacturing visualization fixtures and CAD automobile work, simple

automotive diagnosis and repairs.
Electrical workshop practice: convention and application of colours, codes for cables resistors etc and signs. Use of simple electrical tools, machines etc.

ENG 103: ENGINEERING DRAWING I (0, 0,1) 1 CREDIT

Introduction to engineering tools. Planning and layout of engineering drawing. Engineering drawing concept. Introduction to dimensioning of circles, holes, radii, tolerance. Descriptive geometry, freehand sketching. Introduction to drawing/drafting software and CAD basic tools. Orthographic multi view projection. Construction of plane shapes using CAD construction techniques Presentation of data and results. Using charts, graphs etc by appropriate computer software. Further dimensioning addition of dimensions to drawings using CAD.

ENG 104: ENGINEERING DRAWING II (0, 0,1) 1 CREDIT

Connections in engineering drawing. Introduction to IS Code of drawing. Conics and engineering curves ellipse, parabola, hyperbola, cycloid, trochoid, involutes. Projection of planes and solids (cube, prism, pyramid, cylinder, core and sphere.) projection on auxiliary planes. Isometric projection. Introduction to section drawing and use of CAD construction techniques. Development and intersection of surfaces. Detail drawing with the addition of machine and surface texture symbol. Simple assembly drawing with suitable fits and part list and introduction to limits and tolerances. Screw thread, fasteners and springs including keys and key ways.

200 LEVEL

HARMATTAN SEMESTER

HST 201: HUMAN ANATOMY (1,0,1) 2 CREDITS

Overview of cell biology, histology and anatomical features of human skeletal, muscular, nervous, cardiovascular, respiratory, digestive, excretory, endocrine and reproductive systems.

HST 203: GENERAL BIOCHEMISTRY(1,0,1) 2 CREDITS

Review of general biochemistry; Chemical elements and the periodic table; Electronic configuration, electronic orbital, valency of atoms and types of chemical bonds; metals and non-metal; acids and bases, highlighting Lewis conception; carbon, sp3 hybridization, the tetrahedron and covalent bond; functional groups; water and its special properties. Carbohydrates: the glycosidic bond; relationship of photosynthesis and tissue respiration; Introduction of the cell and hierarchy of organization of living things: macromolecules, organelles, cells, tissues, organs and organisms. Amino acids proteins; the peptide bond and polypeptides; proteins as biological catalysts, immune agents and structural molecules. carbohydrate as storage molecule of easily accessible metabolic energy. Fatty acids and lipids: the ester bond of lipids and triglycerides; Fat as efficient energy storage molecule. Nucleic acids and nucleotides: DNA and RNA as polymers of nucleotides; the phosphodiester bond; Gene and genetic information transcription and translation.

HST 205: GENERAL MICROBIOLOGY(1,0,1) 2 CREDITS

History and scope of microbiology; the general characteristics of microorganism. Prokaryotic and Eukaryotic

microorganism. Bacterial morphology and cell structure. Growth and reproduction of microorganisms. Biochemical reactions of microorganisms, antimicrobnial agent. Systematic classification of bacteria, fungi viruses algae and protozoa.

GST 201: NIGERIA & AFRICAN CULTURE (2,0,0) 2 CREDITS

Concept and meaning of development; traditional African- its geographical and ethnogeographical review, its family structure, kingship systems etc; socio-economic preoccupations, political systems, art and music, modes of communication; African and processes of modernization-education, writing and the press; urbanization and social change, modern trends in art and aesthetics, naturalization and cultural revival, mass media and national development.

CSC 201: COMPUTER APPLICATION (2,1,1) 4 CREDITS

Brief history of computers and computer generation. Classification of computers. Structure of a general purpose computer. Number systems. The stored programme. Techniques of proble solving. Flowcharting. Stepwise refinement. Algorithm for searching, sorting and merging of ordered lists. Data preparation. I/O devices. Data types. Data representation. Data capture problem-oriented languages. BASIC and FORTRAN programming: arithmetic expression; arrays; sequencing, alternation and iteration; sub-programmes and parameters. Elementary numerical Algorithms.

PHT 201: HUMAN GENETICS IN HEALTH& DISEASE (1,0,0) 1 CREDIT

Introduction to genetics including Mendelian genetics, linkage and mapping, nucleic acid structure, replication and function,

pritein synthesis and genetic code, mutation genetic engineering and associated technologies, gene regulation in bacteria and viruses. Implications for human health and diseases are reviewed. Inherited diseases and their control.

OPT 201: GENERAL PSYCHOLOGY (2,0,1) 3 CREDITS

Overview of the historical and philosophical background of Psychology. Branches of Psychology. Schools of thought and personalities involved, Structuralism, Functionalism, Psychoanalysis, Behavioralism, Humanism, Gestalt Psychology. Psychological equipment for behaviour: Nervous system, Glandular system, Sensation-Vision, Audition, Alfaction, Gustation, Equilibrium, Cutaneous sense. Perception; Emotion and its theorists; Motivation and theories of motivation; Learning, types of learning and theories of learning; Thinking, Memory, Psychological tests and criteria for evaluating them; Intelligence; Personality.

OPT 203 : HUMAN HISTOLOGY (1,0,1) 2 CREDITS

Microscopic anatomy of human cells, tissues, organs and organ systems. Basic tissues: Epithelium, connective tissues, including blood, bone and cartilage, muscles and nerves; digestive, respiratory, cardiovascular, endocrine, nervous and reproductive systems. The sense organs and human integument.

RAIN SEMESTER

HST 202:HUMAN PHYSIOLOGY (2,0,1) 3 CREDITS

Overview of the physiology and its application: cellular physiology; homeostasic and homeostatic mechanisms; physiology of the skin; nutrition and gastro-enterology;

circulatory and cardiac physiology; renal physiology; respiratory physiology; reproductive fetal and neonatal physiology; endocrinology and neurophysiology; Physiological measurements and factor affecting them. Neuromuscular systems.

HST 204:MEDICAL BIOCHEMISTRY (1,0,1) 2 CREDITS

Carbohydrate metabolism; Glycolysis and intermediary metabolism. Election transport and exidative phosphorylation. Disorders of carbohydrate metabolism (e.g. diabetes, etc.). Blood lipids and lipid metabolism; Disorders of lipid metabolism, amino acid and protein metabolism; disorders of protein metabolim. Gene expression and molecular diseases (e.g. sickle cell, etc.). Liver function and tests. Renal function and tests. Blood chemistry (including haemopoesis). Hormones and metabolism; endocrinal diseases (e.g. goiter, etc.).

HST 206: MEDICAL MICROBIOLOGY (1,0,1) 2 CREDITS

Introduction to Medical Microbiology: Basic concept and terminology infection and Disease, Pathogenically and Virulence. Immunity, hypersensitivity, Latency and Communicability. Pathogenic properties of Bacteria Invasiveness, Toxigenicity and Exotoxins, Virulence properties. Host Defence Mechanisms-Skin and Mucous Membrane Barriers, Phagocytic Defence and Inflammation.

Bacterial infections: The pathogenicity, morphology and cultural characteristics of certain groups of bacteria. Gram-positive bacteria-Bacillus, Clostridium, Staphylococcus and Sreptococcus. Gram-negative bacteria - the family Enterobacteriacae, Neisseria, Pseudomonas and Vibrio.

Mycotic Infections: Types of mycoses - The morphology, Laboratory diagnosis and treatment of diseases caused by certain groups of fungi to include Aspergillus, Blastomyces, Candida, Cryptococcus, Histoplama, Sporotrichum and Yeasts

Viral infections: Classification of Viruses - Distinctive properties of Viruses - Methods for the diagnosis of Viral Infections.

HST 208: ORGANIC CHEM FOR HEALTH PROF. (1,0,1) 2 CREDITS

Organic chemical bonds; formation, types and bond energy, organic chemical reaction types; addition, substitution (nucleophilic and electrophilic); thermodynamic and kinetic control of products. Functional groups and functional group analysis. Aromatic compounds; benzes rings, etc. Stereochemistry and stereoisomerism. Steroids; structure and function. Organometallic compounds; hemoglobin, chlophyll, etc.

PHT 204: HEALTH & HUMAN BEHAVIOUR (2,0,0) 2 CREDITS

Introduction to the behavioural science of sociology, anthropology and social-psychology with special reference to how theories and concepts in these fields relate to health, illness and health care delivery.

OPT 202: HUMAN ANATOMY 11 (2,0,1) 3 CREDITS

Pre-requisite: HST 201

This is a continuation of HST 201 consisting of regional anatomy of the endocrine, nervous and reproductive systems,

sense organs and human integument.

.OPT 204: INTRODUCTION TO OPTOMETRY/HISTORY OF OPTOMETRY (2,0,0) 2 CREDITS

Understanding Optometry as a health care profession. Relationship of the profession to others in the eye care field including Ophthalmology and Opticianry. Opportunities available to the Optometrist as a professional. Attitude needed for the study and practice. A general knowledge of the legal status, standards of practice, professional conduct and association. Introduction to Optpmetric terms, instrumentation and literature. Optometry in America, Asia, Africa and Europe and the historical development and personalities involved; from the ancient times (day of Hammurabi); the middle centuries, the renaissance period; the seventeenth century; the eighteenth century. The golden age of optics till the present period.

OPT 206: DEVELOPMENTAL AND CLINICAL PSYCHOLOGY (3,0,0) 3CREDITS

Pre-requisite:OPT201

Psychology in human growth and development. Distinction between development, growth and maturation. Influences of nature and nurture on development and in individual differences. Principles of development. Theories of development. Detailed treatment of stages, concepts, types and characteristics of human development. Disturbances in development.

300 LEVEL

HARMATTAN SEMESTER

HST 301: GENERAL PATHOLOGY (2,0,0) 2 CREDITS

Definition of pathology, disease and relevant terms used in pathology. The causes and classification of diseases. Cell damage and its sequale. Inflammation, its functions and types. Cardinal signs and mechanisms of inflammation. Infection and the body's defence against it. Body's response to infection including immunity to infection. Cross infection and its control. Some important bacterial, fungal and viral infections including tuberculosis, candidiasis and HIV/AIDS. Disorders of growth including hyperplasia, hypertrophy, dysplasia and dystrophy. Tumors, their aetiology, types, classification and characteristics. Cysts, their formation and classification. Developmental anomalies or disturbances. Effects of ionizing radiations on human tissues. Trauma-wounds, fractures, dislocations and bleeding. Systems Pathology: Disorders of blood-disorders of red blood cells, WBC's and thombocytes. Disorders of circulation. Disorders of the Heart, diseases of the respiratory system, gastro-intestinal track and disorders of bones and joints.

HST 303: INTRO. PHARMACOLOGY (2,0,0) 2 CREDITS

Historical development of pharmacology; divisions of pharmacology and their applications; definition of terms and abbreviations; concept and nature of drugs; pharmacodynamics; pharmacokinetics; drug abuse and controlled drugs; drug noncompliance or misuse; intro to toxicology and its importance; general principles of poisoning management. Drug meaning, sources and outline of the

processes of preparation. Methods and routes of drug administration with special emphasis on the administration of ocular drugs. Advantages and disadvantages of eah method. Fate of topically applied ophthalmic drugs; physiologic factors that influence corneal absorption drugs; physiologic factors that influence corneal absorption of drugs. Fate of systemically administered drugs. Prescription writing. Action of drugs factors influencing it. Compatibility and incompatibility, tolerance, tachyphylaxis, potentiation, synergism, additive and antagonistic effects.

OPT 301: HUMAN PHYSIOLOGY 11 (2,0,0) 2 CREDITS

Pre-requisite: HST 202

Renal system and body fluid including control of blood pressure and water balance, control of plasma sodium and potassium levels, acid-base balance, etc;, Circulatory system including cardiac cycle, blood flow and pressure, lymph formation and function, etc; Endocrine system including hormones, pituitary gland, adrenal cortex, regulation of blood sugar levels, vitamin D, pregnancy and lactation, etc.

OPT 303: OCULAR ANATOMY 1 (2,0,1) 3 CREDITS

Pre-requisites: HST 201, OPT 202

This course includes a detailed description of the gross structure of the visual apparatus: The orbit, its contents and related structure. Specific description of the anatomy of all parts; lids, cornea, sclera, choroids, iris, lens and retina.

OPT 305: OCULAR PHYSIOLOGY 1 (2,0,0) 2 CREDITS

Pre-requisites: HST 202, This course includes a detailed description of the gross structure of the visual apparatus: the

orbit, its contents and related structures. Specific description of the physiology of all parts: lids, cornea, choroids, iris, lens and retina.

OPT 307: PHYSICAL OPTICS (2,1,0) 3 CREDITS

Principles of wave optics, interference, diffraction, polarization radiometry, photometry. Quantum nature of light, spectroscopy lasers, relativistic optics. Gaussian theory: principal points and nodal points, equivalent power and vertex power, field lenses, eye pieces and telephoto lenses.

OPT 309: GEOMETRIC OPTICS (1,1,0) 2 CREDITS

Basic properties of light-rectilinear propagation, wavelength, wavefronts, shadows, pin-hold camera, Huygen's principle. Reflection at plane surface, curved surfaces. Refraction at plane surfaces and curved surfaces. Thin lenses and coaxial systems of thin lenses. The spectrum, dispersion and colour.

OPT 311: PHYSIOLOGICAL OPTICS 1 (2,0,1) 3 CREDITS

A study of the dioptric functions of the visual apparatus consisting of lectures and demonstrations.The eye as an optical instrument, the schematic and reduced eyes, dioptrics of the eye, optical constants, cardinal points, refractive power of the surfaces and media. Location and size of retinal images, visual angle and size of retinal images. Amplitude of accommodation and prebyopia. Emmetropia, refractive status of the eye and optical aberrations.

RAIN SEMESTER

OPT 302: OPHTHALMIC OPTICS 1 (1,0,1) 2 CREDITS

Optical characteristics and design of standard ophthalmic

single vision, bifocal, trifocal, progressive lenses and ophthalmic prisms. Emphasis will be placed on physical properties of lens materials including index of refraction, absorptive ability, lens coatings and special application of lens materials to different occupations, low vision and sports. Characteristics of frame materials, design and selection inclusive.

OPT 304: OCULAR ANATOMY 11 (2,0,1) 3 CREDITS

Pre-requisites: HST 201, OPT 202, 303

This is the continuation of OPT 303 and it includes the anatomy of the humour, lacrimal apparatus, the cranial nerves, extraocular muscles, as well as the process of vision and visual pathway. The lectures are aided in the laboratory with coloured charts, models, human skull and actual dissection of bull's eye.

OPT 306: OCULAR PHYSIOLOGY 11 (2,0,0) 2 CREDITS

Pre-requisites: HST 202, OPT 305.

Continuation of OPT 305. It includes the humour, lacrimal apparatus, the corneal nerves, extra ocular muscles as well as the process of vision and visual pathway.

OPT 308: GENERAL PHARMACOLOGY (1,1,0) 2CREDITS

Pre-requisite: HST 303

Malaria chemotherapy, vitamins, Mectizan. Drugs affecting the central nervous system; drug abuse (i) stimulants (ii) depressants (iii) analgesics (iv) sedatives (v) antipyretics (vi) tranquilizers. Muscle relaxants. Anti-diabetics. Oral contraceptives. Toxicology. Adverse effects of systemic drug therapy. Adverse effects of ocular drug therapy.

OPT 310: NEURO ANATOMY & PHYSIOLOGY (2,1,0) 3 CREDITS

Pre-requisites: HST 201, 202, OPT 202

This course deals with the embryology, anatomy and functions of the central nervous systems, relationship with the eye, vision, neural connections of the eye and related structures; general neurology of the human

OPT 312: PHYSIOLOGICAL OPTICS 11 (1,0,1) 2 CREDITS

Pre-requisite: OPT 311

Sensory aspect of visual perception, ocular motility and innervational systems. Normal and abnormal binocular vision-heterophoria, heterotropia, measurements by dissociation and synoptophore instruments. The visual pathway, disturbances in the neural-pathway and factors affecting it. Retinal photo-receptors, photochemistry, retinal neural connections and neurophysiology. Scotopic and photopic vision. Rodopsin and its transformation. Rods and cones distinction. Retinal stimulation and resultant changes.

HST 304: STATISTICS FOR HEALTH PROF. (1,1,0)2 CREDITS

Applications of descriptive, inferential, parametric and non-parameric statistics to health, theory of probability sampling techniques, hypothesis testing, dealing with error, construction and interpretation of graphs and data tables. Biostatistics; population sampling; structural measurement; statistical applications to health and medicine; drug counting; health survey.

ENG 314: ENTREPRENEURSHIP 1 (2,1,0) 3 CREDITS

Technology development and entrepreneurship-Evolution of

industrial, domestic and commercial products, identification of society's needs, market survey, invention, innovation and diffusion, patents, trademarks and copyrights. Maintenance culture, concept of maintenance scheduling. Business planning, financial accounting and marketing, consultancies, small business star up and management. Internet connectivity methods and analysis. Product research development method using Internet browsing.

Practice: Innovative solutions to invention needs chosen by students. Development of new products of processes. Development of business plants and proposals.

400 LEVEL

HARMATTAN SEMESTER

OPT 401: OCULAR PATHOLOGY 1 (1,1,0) 2 CREDITS

Pre-requisite: HST 301

General overview of the disease process with emphasis on the anterior segment, including congenital and acquired deformities: basic causes , symptoms and signs of pathology, prognosis, management and prevention are covered. Diffuse diseases and sequelae of the eye; diseases and abnormalities of the external eye, adnexa, conjunctiva, cornea, sclera, uveal tract, lens, vitreous, glaucoma, orbit, trauma and ocular emergencies.

OPT 403 OCULAR PHARMACOLOGY 1 (2,0,0) 2 CREDITS

Pre-requisites: HST 303, OPT 308

Drugs used in ophthalmic practice-anti-infective, anti-inflammatory, diagnostics, local anaesthetics, indicators,

mydriatics, miotics etc. ocular side effects of systemic drugs-brief survey. Sterilization of instruments. Contact lens solutions. Abbreviations used for medications.

OPT 405: GENERAL OPTOMETRY 1 (1,1,0) 2 CREDITS

The optometry examination: The case history and its relationship to optometric examination. Visual acuities cover testing, test of versions and vergences, near point of Von Graefe phoria testing and prism vergence testing. Static and dynamic retinoscopy; subjective sight testing, fogging, fandial, monocular cross cylinder, monocular and binocular balancing. Methods of measuring amplitude of accommodation and determining the near addition.

OPT 407: OPHTHALMIC OPTICS 11 (2,0,0) 2 CREDITS

Pre-requisite: OPT 302

A continuation of OPT 302 with special emphasis on unique optical materials and their functions. It covers calculations and formulae to compute market and true power, lens thickness and the relation of optical center to edge thickness. Base curve, flat and toric transpositions, lensometry.

OPT 409: CONTACT LENS 1 (1,0,1) 2 CREDITS

Introduction to contact lens, outlining the history and development of new materials, advantages and disadvantages of this material including indications and contraindications to contact lens wear. Contact lens optics, designs, ordering, verification and modification, care products and complications.

OPT 411: GENERAL OPTOMETRY LAB (0,0,3) 3 CREDITS

Techniques learnt in OPT 405 are practiced and developed preparatory to examining patients.

HST 401:HEALTH INFORMATION MGT SYSTEM (2,1,0)3 CREDITS

Study of contemporary public health information system especially as used in Morbidity surveys, disease surveillance systems, disease registers, etc. also includes introduction to computer simulation techniques and life-table techniques. Medical and health database management; intranet, Internet and extranet applications. E-Library; information globalization and teleconference.

HST 403: RESEARCH METHODS & TECHNIQUES (2,1,0) 3 CREDITS

Rudiments of research methodology and its application to the public health field. Course covers a basic learning of the following aspects: research problem definition, research questions, research and Null hypothesis theoretical-conceptual formulation of research problems, review of related literature, basic research designs, methods of research observations, measurement of variables, data analytic techniques, interpretation of research findings. Includes study of randomization techniques, epidemiologic research designs and controlled clinical trails.

RAIN SEMESTER

OPT 402: PHYSIOLOGICAL OPTICS 111 (2,0,1) 3 CREDITS

Pre-requisites: OPT 311,312

The photochemistry of vision. Sensory aspects of vision; colour vision and adaptation. The mechanism of colour vision defects, their detection and significance. Electrophysiology of the retina and visual pathway. Pulfrich phenomenon, Postpoint,

Presion adaptation, Horopter, the cyclopean eye, Fixation disparity, Desk adaptation labs, Optical illusions, Holography, Entoptic Phenomenon.

OPT 404: GENERAL OPTOMETRY 11 (2,0,2) 4 CREDITS

Pre-requisites: OPT 405, 411

A continuation of OPT 405 and 411. The integration of individual findings. Visual analysis, graphical analysis, diagnosis, prognosis and therapy. Introduction of specialized techniques such as tonometry, ophthamoscopy, lensometry, colour vision testing and sphygnomanometry. General health and the influence of the various health conditions on the eyes. Ocular complaints, causes, signs and symptoms. Headaches and their causes, fatigue, neuroses, effects of drugs.

OPT 406: CONTACT LENS 11 (2,0,2) 4 CREDITS

Pre-requisite: OPT 409

A continuation of OPT 409. Advanced fitting techniques; toric and bitoric lenses, keratoconic patients. Monitoring contact lens wearers and fitting presbyobic patients.

OPT 408: OCULAR PATHOLOGY 11 (1,1,0) 2 CREDITS

Pre-requisites: HST 301, OPT 401

A continuation of OPT 401. Pathophysiology, detection and management of posterior segment diseases/disorders of the retina, optic nerve, neural pathway including ocular manifestation of systemic and localised diseases; ocular emergencies. Students should be able to recognize and differentiate these diseases ophthalmoscopically and represent them in colored illustrations.

OPT410: OPTOMETRIC INSTRUMENTATION AND MAINTENANCE (1,0,1) 2 CREDITS

Principles of operation, basic maintenance and repairs of common Optometric Instruments.

OPT412: EPIDEMIOLOGY (2,0,0) 2 CREDITS

Pre-requisites: HST 301, OPT 401

General epidemiologic concepts. Distribution and dynamics of diseases. Natural history, epidemiologic methods, infectious disease epidemiology, decision analysis and clinical decision making, study design, core study.

OPT 414: ANOMALIES OF BINOCULAR VISION (1,1,0) 2 CREDITS

Requisites for normal binocular vision. Anomalies of sensory and motor mechanisms. Incidence and classification of strabismus and amblyopia. Neurological basis for binocular vision. Causes of strabismus and amblyopia. Adaptive conditions commonly associated with strabismus. Clinical characteristics of eyes with amblyopia. Routine eye examination of strabismic patients and anisometropic amblyopes. Clinical work included.

500 LEVEL

HARMATTAN SEMESTER

OPT 501: DISPENSING OPTICS 1 (1,0,1) 2 CREDITS

Ophthalmic lens manufacture; surfacing and edging. Insertion of lenses into frames and frame repair.

OPT 503: LOW VISION & OCULAR PROSTHESIS (2,0,1) 3 CREDITS

This course is designed to familiarize the student with a wide range of physiological disorders and diseases that lead to significant vision, and the optical and non-optical devices used to provide correction. Emphasis on the use telescopic magnifiers, illuminating devices and a list of resources for the partially sighted patient. Ocular prosthesis - evaluation and fitting.

OPT 505: ADVANCED CONTACT LENS PRACT. (1,0,1) 2 CREDITS

Pre-requisites: OPT 409, 406

Advanced contact lens practice and application to special cases. Astigmatism, Keratoconus, presbyopia, Aphakia, Low vision and special uses of contact lenses. Further studies of fitting defects, objective observation, subjective symptoms and modification. Other special fitting problems.

OPT 507: PHYSIOLOGICAL OPTICS IV (2,0,1) 3 CREDITS

Pre-requisites: OPT 311, 312, 402

The perception of depth, direction, size, shape, distance, motion and time through the visual medium. Optical illusions and entopic phenomena, their causes and significance to the visual system. Laboratory work is included.

OPT 509: ORTHOPTICS (1,0,1) 2 CREDITS

Pre-requisite: OPT 414

Definition, types of muscle imbalance, heterophorias. Application and use of various visual training and orthoptic devices and instruments. Different exercises, prisms, Remy

separator, Maddox wing. Measurement of deviations.

OPT 511: OCULAR PATHOLOGY 111 (2,0,1) 3 CREDITS

Pre-requisites: HST 301, OPT 401, 408

Papillary and accommodative anomalies in numerological diseases. Headaches, Migraines and other photopic episodes. Optic nerve disorders, supranuclear nuclear and infranuclear oculomotor presentations, nystagmus. Associated visual field disorders and the study of different instruments for field charting.

OPT513: CLINICAL PROCEDURES/ PRACTICE 1 (2,0,2)4 CREDITS

Pre-requisites: HST 301, OPT 401, 404, 408

Examination, diagnosis and treatment of patients in the optometry clinic under the supervision of an optometrist. Emphasis is placed on the routine optometric examination and the detection of pathology.

MEE 503: ENTREPRENEURSHIP 11 (1,0,0) 1 CREDIT

Pre-requisite: ENG 314

Nature and importance of entrepreneurs. Who is an entrepreneur ? Creating and starting a business enterprise; financing new enterprise expansion; managing new enterprise expansion. The entrepreneur process: managerial and entrepreneurship. Decision making; study of some successful entrepreneurs in Nigeria, Africa, Europe, America, the World. Basic engineering management techniques-planning, organizing, directing and controlling.

OPT 502: DISPENSING OPTICS II (1,0,1) 2 CREDITS

Pre-requisite: OPT 501

Ophthalmic frames, facial measurement and frame sizes. Placement of optical centres, bifocals and multifocal segments. Adjustment of frames and minor repairs. Order writing.

OPT 504: GERIATRIC OPTOMETRY (2,0,0) 2 CREDITS

Defining the geriatric patient. Psychological, physiology, social and ocular problems of the elderly. Techniques for refraction, binocularity and ocular health assessment for the elderly with emphasis on involutional and pathological changes. Special oculo-visual problems of concern to the elderly patient. Presbyopia, cataract, aphakia, visual field losses, low contrast sensitivity and color vision. Handling and counseling the elderly patient. Problems of therapy, management and complaisance. Special problems of the hospitalized and bedridden elderly patients. Clinical; work is included.

OPT 506: PEDIATRIC OPTOMETRY (2,0,1) 3 CREDITS

A review of the development of vision and the distribution of refractive errors among infants, common congenital disorders, clinical assessment procedures for the young patient (birth through elementary school), identification of learning disorders and recommendation of appropriate remedial programme. Clinical work is included.

OPT 508: PRACTICE MANAGEMENT (2,0,1) 3 CREDITS

The various modes of practice; single, partnership, group practice, employed practice in hospitals, government and

industry. The development and management of optometric practice. Office location and layout and the development of inert and intra professional relationships. Financing the optometric practice; initial purchase of equipment and stock; accounting procedures; investment; limited liability companies. Introduction to legal system; employment agreements.

OPT 510: VISUAL ANALYSIS (2,0,1) 3 CREDITS

Pre-requisites: OPT 404, 509

Visual analysis through case studies based on the various eye examination procedures that the clinician learned in the previous levels of programme. Emphasis is place on cases that need prismatic correction, age related visual problems, neurosis and the problems that a patient would likely suffer from and how the clinician should handle such cases.

OPT 512: ENVIRONMENTAL VISION (1,0,1) 2 CREDITS

Radiation and illumination, protection against radiation and other hazards; Evaluation design of lighting; vision through the atmosphere; Problems of vision under water; Human factors in the solution to vision problems.

OPT 514: CLINICAL PROCEDURES/ PRACTICE 11 (2,0,2)4 CREDITS

Pre-requisites: HST 301, OPT 401, 408, 513

A continuation of OPT 513. Examination, diagnosis and treatment of patients in the Optometry clinic under the supervision of an Optometrist. Emphasis is placed on the routine optometric examination and detection of pathology.

MEE 504: ENTREPRENEURSHIP 111 (1,0,0) 1 CREDIT

Pre-requisites: ENG 314, MEE 503

Creativity and starting off a business enterprise. Methods of generating ideas: brainstorming, synectics, checklist methods, Gordon method, Reverse brainstorming, Free, Association, Collective Notebook method, Heuristics, scientific method, value analysis, attribute listing, matrix charting, big dream approach, parameter analysis: Legal issues in entrepreneurship marketing, financial and organizational plans. Financing the new business Enterprise.

600 LEVEL
HARMATTAN SEMESTER

OPT 601: CLINICAL PROCEDURES/ PRACTICE111 (0,0,6)6 CREDITS

Pre-requisites: HST 301, OPT 401, 408, 513, 514

Clinical practice with emphasis on total scope of optometric patient care including general care of children, adults and geriatric population; diagnosis of ocular disease; contact lenses; visual training dispensing.

OPT 603: OCULAR PHARMACOLOGY, THERAPEUTICS & TOXICOLOGY (2,1,0) 3 CREDITS

Pre-requisites: HST 303, OPT 308, 403

Antimicrobial drugs. Anti-inflammatory drugs, local anesthetics. Diagnostic drugs. Drug treatment of common ocular conditions-glaucoma, inflammatory conditions etc. Toxicology.

OPT 605: ETHICS & JURISPUDENCE (2,1,0) 3 CREDITS

Code of ethics and rules of professional conduct. Inter-professional relationship, professional associations and legal aspects of practicing Optometry in Nigeria.

OPT 607: EXTERNSHIP (0,0,4) 4 CREDITS

Optometric patient care provided in interdisciplinary and non-interdisciplinary health care setting (external to the University) by students under strict supervision.

OPT 609: SEMINAR ON RESEARCH TOPICS (0,0,2) 2 CREDITS

Recent developments in Optometry are presented. Review of current literature, critical views on the latest diagnostic and therapeutic techniques are discussed.

RAIN SEMESTER

OPT602: CLINICAL PROCEDURES/ PRACTICE IV (0,0,6) 6 CREDITS

Pre-requisites: HST 301, OPT 401, 408, 513, 514, 601

A continuation of OPT 601.

OPT 604: HOSPITAL PRACTICE (1,1,0) 2 CREDITS

This involves attending to patients within health care setting external to the University: Hospitals, Health Centers and ambulatory care services. Inter-disciplinary practice.

OPT 606: EXTERNSHIP (0,0,4) 4 CREDITS

A continuation of OPT 607

OPT 608: THESIS **(0,0,6) 6 CREDITS**

Areas of research emphasis to be discussed with the faculty. Each students is to undertake an investigation/research in the selected and approved area for the purpose of discovering, exposing new facts of throwing more light on existing facts. Oral defense before a defense panel to be appointed by the school and whose membership should include an external examiner.

CURRENT STAFF LIST

ACADEMICS

S/NO	NAME	RANK	QUALIFICATIONS
1.	Prof. O.C. Abanobi	Professor	B.A., Ph.D., MPH.(Research Methods)
2.	Prof I.N.S Dozie	Professor	B.Sc.,. M.Sc., Ph.D. (Public Health Microbiology)
3	Dr. F.O. Iwuagwu	Reader (Adjunct)	OD., FNCO., FNOA (Optometry)
4	Dr. Mrs. C.O. Chukuezi	Reader	B.A., M.Sc., Ph.D. (Psychology)
5	Rev. Sr. Dr. E. Oparaocha	Reader	B.Sc., M.Sc. Ph.D. (Human Genetics/Disease)
6	Dr.A.N. Amadi	Reader	B.Sc., M.Sc. Ph.D. (Public Health)
7	Dr. C. Osuagwu	Snr. Lecturer	B.Sc, M.Sc, Ph.D. (Med. Biochemistry)
8	Dr. A. Uwaleke	Snr. Lecturer	B.Sc., M.Sc., Ph.D. (Computer Application)
9	Dr. E.C. Esenwah	Snr. Lecturer	B.Sc., OD.,M.Sc., FNCO., FNOA (Optometry)
10	Dr. J.O. Ogunbowale	Snr. Lecturer	Ph.D. . MSW (Maxillofacial Prosthesis)
11	Dr. Mrs. O. Amaechi	Snr. Lecturer (Adjunct)	OD, M.Sc., FNCO, FNOA (Optometry)
12	Dr. Nzotta	Snr. Lecturer (Adjunct)	B.Sc., M.Sc., Ph.D. (Med. Physics)
13	Dr. Mrs. N.C. Ikoro	Lecturer 1	B.Sc., O.D., M.Sc., (Optometry/Pharmacology)
14	Rev. Fr. Dr. B. I. Ozoigbo	Lecturer 1	B.A., B.A., M.A., MPA., Ph.D. (Psychology)
15	Dr. K. Dike	Lecturer 1 (Adjunct)	B.Sc., MB.CH., FWACS (Ophthalmology)
16	Dr. E.M. Okorie	Lecturer 1	OND., OD., (Optometry)

17	Dr. I.C. Nwawume	Lecturer 11	OD. (Optom
18	J. Ekezie	Lecturer II	B.Sc., M.Sc. (I Anatomy)
19	S.C. Iwuji	Lecturer 11	HND., B.Sc., M.Sc. (Physiology Pharmacology)
20	Dr. Mrs. E. M. Daniel Nwosu	Asst. Lecturer	O.D. (Optometry)

S/NO	NAME	RANK	QUALIFICATIONS
1	P. Nwagwu	Asst. Chief Technologist	BS.BM., AAS Ophth. Sc., ABOC., FNAO., FOAA
2	V. Osuala	Technologist 1	HND (Dispensing Optics)

S/NO	NAME	RANK	QUALIFICATIONS
1	Mr. C.C. Uzoho	Prin. Asst. Registrar	B.Ed., M.Ed.
2	Mrs. J. N. Ikeme	Prin. Asst. Registrar	B.A. (Hons)
3	Mrs. J.C. Ogbonna	Chief Typist	PITMAN
4		Clerical Officer	O'Level
5	Ms A. Opara	Computer Operator/Clerk	O'Level