OBAFEMI AWOLOWO UNIVERSITY
ILE-IFE, NIGERIA

FACULTY OF EDUCATION

DEPARTMENT OF SCIENCE AND TECHNOLOGY EDUCATION

2019 HANDBOOK

PRINCIPAL OFFICERS OF THE UNIVERSITY

Visitor
Alhaji Muhamadu Buhari, GCFR
President, Commander-in-Chief of the Armed Forces
of the Federal Republic of Nigeria

Chancellor
Alhaji Yahaya Abubakar
His Royal Highness, The Etsu Nupe

Pro-Chancellor
Dr. Yemi Ogunbiyi
Pro-Chancellor and Chairman of Governing Council

Vice Chancellor
Professor Eyitope O. Ogunbodede

Deputy Vice-Chancellor (Academic)
Professor Adebayo Simeon Bamire

Deputy Vice-Chancellor (Administration)
Professor Chris Olugbenga Ajila

Registrar
Mrs. Margaret I. Omosule

University Librarian
Dr. Femi Zacchaeus Oguntuase
B.A. Eng. Educ. (Ife) M.L.S. (Ibadan)
Ph.D. (Ibadan) MBA (FUTA) PDGCS (FUTA) CLN

Ag. Bursar
Mrs. R. B. Fakunle
B.Sc. (Accounting), Dip (Micro-Computer), M.B.A. (Ife)

Dean, Faculty of Education
Professor Morufu Ademola Adeleke

OFFICERS OF THE FACULTY

Dean:	Professor M. A. Adeleke
Vice Dean:	Dr (Mrs) C. A. Okotoni
Faculty Secretary:	Mrs Stella O. Makanju

HEADS OF DEPARTMENTS/DIRECTOR OF INSTITUTE

Dr. (Mrs) M. O. Salami	Department of Science and Technology Education
Prof. (Mrs.) B. A. Omoteso	Department of Arts and Social Science Education
Dr. C. O. Fashiku	Department of Educational Management
Prof. C. S. Oni	Department of Adult Education and Lifelong Learning
Prof. T. A. Bada	Department of Educational Technology and Library Studies
Dr (Mrs) C. F. Akinnubi	Department of Physical and Health Education
Dr. A. A. Shobola	Department of Educational Foundations and Counselling
Dr. O. A. Adelodun	Institute of Education

ACADEMIC STAFF OF THE DEPARTMENT

S/N	Name	Qualifications	Status	Area of Specialization
1.	Prof. M. A. Adeleke	B.Sc. Ed, M.A. Ed, Ph.D. (Ife)	Professor	Mathematics Education and Curriculum Studies
2.	Dr. E. O. Oloyede	B.Sc. Ed, M.A. Ed, Ph.D. (Ife)	Reader	Mathematics Education and Curriculum Studies
3.	Dr. E. F. Bamidele	NCE, B.Sc. Ed. M.A. Ed, Ph.D. (Ife)	Reader	Chemistry Education and Curriculum Studies
4.	Dr. (Mrs). M. O. Salami	NCE, B.Sc. Ed. M.A. Ed, Ph.D. (Ife)	Senior Lecturer	Biology Education and Curriculum Studies
5.	Dr. I. A. Ojediran	NCE, B.Sc. Ed, M.Sc., M.Ed., Ph.D. (Ife)	Lecturer I	Physics Education, Technology Management and Curriculum Studies
6	Dr. T. A. Adebisi	B.Sc. Ed. (Ilorin), M.Ed. (Ibadan), Ph.D. (Ado-Ekiti)	Lecturer I	Physics Education and Science Education
7	Dr. A. A. Adetunji	B.Sc. Ed., M.A. Ed., Ph.D.(Ife)	Lecturer II	Chemistry Education and Curriculum Studies
8	Mr. A. O. Kareem	B.Sc. Ed. M.A. Ed. (Ife)	Lecturer II	Biology Education and Curriculum Studies

ASSOCIATE LECTURERS

S/N	Name	Qualifications	Status	Area of Specialization
1	Prof. O. A. Sofowora	B. A. Ed., M.A. Ed, Ph.D. (Ife)	Professor	Educational Technology
2	Dr. C .O. Babalola	B. A. Ed., M. A. Ed, Ph.D. (Ife)	Senior Lecturer	Adult Education
3	Prof. B .A. Faleye	B.A. Ed., M. A. Ed, Ph.D. (Ife)	Professor	Tests and Measurement
4	Dr. (Mrs) S. A. Ehindero	B. A. Ed., M. A. Ed, Ph.D. (Ife)	Reader	Guidance and Counselling
5	Dr. S. A. Adelokun	B.A. Ed., M.A. Ed, Ph.D. (Ife)	Senior Lecturer	Educational Management
6	Prof. P. O. Jegede	B.Sc., M.Sc. (Lagos), M.Ed., Ph.D. (Ife)	Professor	Mathematics Education, Computer Education
7	Dr (Mrs) T.O. Bello	B.Sc., M.Sc., M.Ed, Ph.D. (Ife)	Senior Lecturer	Physics Education and Curriculum Studies
8	Dr. (Mrs) O. S. Agboola	B.Sc., M.A. Ed, Ph.D. (Ife)	Senior Lecturer	Chemistry Education and Curriculum Studies
9	Dr. O. A. Adelodun	B.Sc., M.Sc., M.Ed, Ph.D. (Ife)	Reader	Statistics
10	Dr. O. S. Olajide	B. Ed, M.A.Ed., Ph.D. (Ife)	Lecturer I	Integrated Science
11	Prof. M. A. Eleruja	B.Sc., M.Sc., Ph.D. (Ife)	Professor	Solid State Physics
13	Prof. J O. Ojo	B.Sc., M.Sc., Ph.D. (Ife)	Professor	Health Physics
14	Dr I. O. Akinnifesi	B.Sc., M.Sc. (Ife), Ph.D. (Toulouse)	Reader	Material Science
15	Prof S. O.	B.Sc., M.Sc., Ph.D.	Professor	Plant Ecology

	Oke	(Ife)		
16	Prof. S. Adekilekun	B.Sc., M.Sc. (Ife), Ph.D. (South Africa)	Professor	Plant growth and Development
17	Dr A. E. Folorunso	B.Sc., M.Sc., Ph.D. (Ife)	Reader	Plant Taxonomy
18	Dr G. A. Akintomide	B.Sc, M.A.Ed., Ph.D. (Ife)	Senior Lecturer	Biology Education
19	Prof J. I. Akinpelu	B.Sc. (Ife), Ph.D. (Aberdeen)	Professor	Population and Ecological Genetics
20	Prof O. Ogunfowokan	B.Sc., M.Sc., Ph.D. (Ife)	Professor	Environmental Chemistry
21	Prof. (Mrs) L. M. Durosinmi	B.Sc., M.Sc., Ph.D. (Ife)	Professor	Inorganic Chemistry
22	Prof L. O. Soriyan	B.Sc., M.Sc., Ph.D. (Ife)	Professor	Physical Chemistry
23	Dr A. K. Olapade	B.Sc., M.Sc., Ph.D. (Ife)	Reader	Distribution Theory and its applications
24	Prof. A. P. Akinola	M.Sc., Ph.D.	Professor	Solid and Composite Mechanics

NON-ACADEMIC STAFF OF THE DEPARTMENT

S/N	NAME	RANK/ DESIGNATION	ACADEMIC QUALIFICATIONS & DATE	POST, QUALIFICATION, WORK EXPERIENCE	PHONE NO.	E-mail ADDRESS
1.	ADETUNJI Racheal Adekunbi (Mrs.)	Chief Secretariat Assistant	WASC 1977, Pitman Stage II,1982, Open Grade Test (Advanced Level), 1995 Electronic Data Processing (EDP) 2002 and June/July NECO Examination 2013	Clerical Officer/Typist - 1978, Senior Typist II- 1990, Senior Typist-I995, Chief Secretarial Assistant – 2006, Chief Secretarial Assistant - 2017	08064258419	raadetunji@gmail.com
2.	ADEOYE, Grace Modupe (Mrs.)	Chief Secretarial Assistant	WASC 1983, Secretarial Course Certificate 35/80 Pass 1987, Advance Typing Certificate 50 W.P.M. 1998, EDP Certificate Lower Credit 2002, NECO 2004, NECO 2005.	Typist II- 1988, Typist I -1995, Senior Typist II- 2001, Senior Typist I - 2006, Chief Secretarial Assistant- 2010.Chief Secretarial Assistant - 2017	08035822790	deoyegrace@yahoo.com
3.	Ibidun Olusegun (Mr.)	Senior Clerical Officer	WAEC 1999, SSCE (2000) Bachelor of Science - (Physics) 2012	Clerical Assistant 1996, Clerical Officer 2000, Senior Clerical Asst. Chief Clerical Officer 2016, Officer 2004. Asst. Executive Officer 2017	08066781343	Segunibidun2@gmail.com

4.	AKANDE, Eunice Funmilola (Mrs)	Clerical Officer	WAEC 1995	Assistant Clerical Officer – 2006 Clerical Officer - 2010, Senior Clerical Officer, 2014	08038581123	efakande@gmail.com

TABLE OF CONTENTS

1.2.1 **History of the University**

A brief history of the University and the Department of Science and Technology Education is presented below.

Obafemi Awolowo University, lIe-lfe is one of three universities established in Nigeria between 1961 and 1962 as a result of the report submitted to the Federal Government in September, 1960 by a Commission appointed in April 1959 under the Chairmanship of Sir Eric Ashby, Master of Clare College, Cambridge, to survey the needs of post-secondary and higher education in Nigeria over the next twenty years.

The Government of Western Nigeria first announced in 1960 its intention to establish as soon as possible a university in Western Nigeria which would be of the highest standard. Its policy would be to open its doors to students from all parts of the Federation and of the world.

The planning of Obafemi Awolowo University was entrusted to two committees. One, a University Planning Committee comprising persons qualified to advice on the planning of a new university, and who in effect undertook the preparatory work connected with the establishment of the University pending the setting up of the Provisional Council of the University. The other, a University Parliamentary Committee, was to advise the Minister of Education. On 8th June, 1961 the Law providing for the establishment of the Provisional Council of the University was formally inaugurated under the Chairmanship of Chief Rotimi Williams.

On 11th June, 1970, an Edict known as the University of Ife Edict, 1970 was promulgated by the Government of the Western State to replace the Provisional Council Law of 8th June, 1961. This Edict has since been amended by Obafemi Awolowo University, Ile-Ife (Amended) Edict No. 11 of 1975 (Transitional Provisions) Decree No.23 of 1975. This new Decree effected a take-over of Obafemi

Awolowo University by the Federal Military Government and established a Provisional Council as an interim governing body of the University which shall subject to the general direction of the Head of the Federal Government, control the policies and finances of the University and manage its affairs. This Provisional Council has since been replaced by a Governing Council.

The site selected for the University was at Ile-Ife, a town about 80 kilometers north-east of Ibadan in Oyo State. Ife is famous as the centre of an ancient civilization and home of the museum which contains the renowned Ife heads. It was intended that temporary buildings should be put up on the site to enable teaching to commence in October 1962 while the permanent buildings were being planned and erected. However, when the Federal Government transferred the Ibadan.

Branch of the Nigerian College of Arts, Science and Technology to the University, it was decided that it would be unnecessary to put up temporary buildings at Ife and the University was temporarily located on the site of Ibadan Branch of the Nigerian College.

Teaching began in October 1962 with an initial enrolment of 244 students. The teaching, administrative and technical staff, either transferred from the Nigerian College or newly recruited from abroad numbered about eighty. The University started with five Faculties - Agriculture, Arts, Economics and Social Studies (now Social Sciences), Law and Science. Six new faculties have since been added, namely the Faculty of Education (established on 1st October, 1967), the Faculty of Pharmacy (established on 1st October, 1969), the Faculties of Technology and Health Sciences (now College of Health Sciences) (both established on 1st October, 1970), Faculty of Administration (which replaces the former Institute of Administration with effect from 1st October 1979) and Faculty of Environmental Design and Management (established on April 6, 1982).

In 1992, the University established a collegiate system with five colleges. The system did not function effectively and was abandoned after two years. However, the Postgraduate College and the College of Health Sciences were retained. The College of Health Sciences now comprises the Faculties of Basic Medical Sciences, Clinical Sciences and Dentistry.

Adeyemi College of Education located in Ondo and the Institute of Agricultural Research and Training in Ibadan were initial1y an integral part of the University. Although Adeyemi College was separated from the University in 1975, there is still a close relationship between the institution and this University. The College offers the degree programme of the University under a system that is closely monitored by the University.

The Institute of Agricultural Research and Training, Ibadan with a branch at Akure in Ondo State, used to be fully superintended by the University in 1991. However, the Akure branch and the College of Animal Science of the Institute continued to report to the Federal Government through the Director of the Institute. In terms of funding, the Institute of Agricultural Research and Training now relates to the Federal Ministry of Agriculture while the University still has administrative responsibility for the research and administrative staff of the Institution. The Director and the Secretary of the Institute are responsible to the University through the Vice-Chancellor and the Registrar respectively. The Vice-Chancellor is the Chairman of the Institute's Governing Board.

The other institutes and major units that exist in the University are as follows:

The Natural History Museum
The Institute of Ecology and Environmental Studies
The Centre for Gender and Social Policy Studies
The Centre for Industrial Research and Development
The Institute of Public Health

The Institute of Cultural Studies
The Technology Planning and Development Unit
The Computer Centre
The Drug Research and Production Unit
The Equipment Maintenance and Development Centre
The Central Technological Laboratory Workshop
The Central Science Laboratory
The Distance Learning Centre

Finally, some other agencies over which the University has no direct, or, in some cases limited control, have premises within the University.

The Regional Centre for Training in Aerospace Surveys
The National Centre for Technology Management
The Centre for Energy Research and Development
The African Regional Centre for Space Science and Education in English

The student population rose steadily from 244 in 1962/63 to 28,758 at the end of the 2005/2006.

Mission, Vision, Objectives of the University

(a) MISSION

To create a teaching and learning community for imparting appropriate skills and knowledge, behavior and attitude; advance frontiers of knowledge that are relevant to national and global development; engender a sense of selfless public service; and promote and nurture the African culture and tradition.

(b) VISION

The vision is of a top rated university in Africa, ranked among the best in the world, whose products occupy leadership positions in the public and private sectors of the Nigerian and global economy,

that has harnessed modern technology, social, economic and financial strategies, built strong partnerships and linkages within and outside Nigeria and whose research contributes a substantial proportion of innovations to the Nigerian economy.

(c) STRATEGIC OBJECTIVES

1. To produce graduates of international standard, with appropriate knowledge and skills in their field of study, who will be highly employable or self-employed.
2. To provide high quality research and development activities that will promote the development of the nation and enhance the image of the University and the researchers.
3. To harness modern technology especially ICT and modern social, economic and financial strategies to run a cost of efficient and effective academic program and institutional management.
4. To provide services which have relevance to and impact on the local community and the nation.
5. To provide conditions of study, work and living in the University community that are of appropriate standards.
6. To expand access to tertiary education in the face of unmet demands.
7. To operate as an equal opportunity educational institution, sensitive to the principle of gender equity and non-discrimination on the basis of race, ethnicity, religions or physical disability.

1.2.5 Members of the University

The members of the University as defined in Statute 2 (1) are:

(a) the officers of the University;
(b) the members of the Council;
(c) the members of the Senate;
(d) the members of the Academic Staff;
(e) the graduates;

(f) the students; and
(g) such other persons as may by Statute be granted the status of members.

A person shall remain a member of the University only as long as he is qualified for such membership under any of the sub-paragraphs of paragraph (1) of this Statute.

1.2.6 The Officers of the University

The officers of the University as contained in Statute 3 shall be:

(a) the Chancellor;
(b) the Pro-Chancellor;
(e) the Vice-Chancellor;
(d) the Deputy Vice-Chancellor (Academic);
(e) the Deputy Vice-Chancellor (Administration);
(f) the Registrar;
(g) the Librarian;
(h) the Bursar; and
(i) such other persons as may by Statute be granted the status of officers.

1.2.7. Establishment of the University Council

(a) Functions

The University Council to be known as the Council of Obafemi Awolowo University, Ile-Ife was established by the Edict. The Edict states that Council shall be the governing authority of the University and shall have the custody, control and disposition of all the property and finances of the University and, except as may otherwise be provided in the Edict and the Statutes, shall manage and superintend generally the affairs of the University and, in any matter concerning the University not provided for or under this Edict, the Council may act in such manner as appears to it best

calculated to promote the interests, objects and purposes of the University.

The Council, subject to the provisions of the Edict and Statutes has the following functions among others:

(i) to determine, in consultation with Senate, all University fees;
(ii) to establish, after considering the recommendation of the Senate on that behalf, Faculties, Institutes, Schools, Boards, Departments and other units of learning and research; to prescribe their organization, constitution and functions and to modify or revise the same;
(iii) to authorize, after considering the recommendations of the Senate in that behalf, the establishments for the academic in the University, and with approval of the Senate, to suspend or abolish any academic post except a post created by this Edict or the Statutes;
(iv) to authorize the establishments for the administrative staff and other staff in the University and to suspend or abolish any such posts other than posts created by the Edict or the Statutes;
(v) to make the appointments authorized by this Edict and the Statutes;
(vi) to exercise powers of removal from office and other disciplinary control over the academic staff, the administrative staff and all other staff in the University;
(vii) to supervise and control the residence and discipline of students of the University and to make arrangements for their health and general welfare.

(b) Composition of the Members of Council

The Council as contained in Statute 10(1) as amended by Decree No. 11 of 1993 and Decree 25 of 1996 shall consist of the following members:

(i) Ex-Officio Members: Pro-Chancellor
The Vice-Chancellor

The Deputy Vice-Chancellors

(ii) 1 member from the Federal Ministry of Education
(iii) 4 members appointed by National Council of Ministers
(iv) 4 members of Senate appointed by Senate
(v) 2 members of the Congregation elected by the Congregation
(vi) I member of Graduates Association elected by Graduates Association

The Senate shall prescribe which Departments and subjects of study shall form part or be the responsibility of each of the Faculties. The next level of organization is the Faculty where the teaching and other activities of the Departments are coordinated. Proposals generally come from Departments to the Faculty Board although they can also be initiated at the Faculty level in which Departments normally have an opportunity to consider them before the Faculty Board takes a decision. The membership of the Faculty Board is stipulated in Statute 13(3) thus:

(a) The Vice-Chancellor
(b) The Deputy Vice-Chancellors
(c) The Dean of the Faculty
(d) The Professors and Heads of Departments comprising the Faculty
(e) Such other full-time members of the academic staff of the Departments comprising the Faculty as the Senate may determine after considering the recommendation of the Faculty Board;
(f) Such other Professors and other Heads of Departments, as the Senate may determine after considering the recommendation of the Faculty Board;
(g) Such other persons within or outside the University as the Senate may appoint after considering the recommendation of the Faculty Board.

The next level is that of Departments which consist of groups of teachers and sometimes Research Fellows in a single subject with a Head who is usually although not always a Professor generally appointed by the Vice-Chancellor.

The Department is the normal basic unit of academic organization. It is at this level that the organization of teaching and the use of research facilities are primarily worked out. Senate may however recommend the creation of institutes for groups of specialized subjects or disciplines that require interdisciplinary research efforts and thus, cut across Faculties in scope.

1.3 Organization and Administration

The Vice-Chancellor is the Chief Executive Officer of the University and the five other principal officers of the University, namely; the Deputy Vice-Chancellors (2), the Registrar, the University Librarian and the Bursar report to him. The University Librarian is in charge of the University Library while the Bursar takes charge of the University finances. The Registrar is the Secretary to Council and the Chief Administrative Officer of the University and he assists the Vice-Chancellor in the day-to-day administration of the University. He is also the Secretary to Senate and heads the Registry, comprising the Directorate of Academic Affairs, the Directorate of Council Affairs, Division of Corporate Services and the Directorate of Personnel Affairs. The Planning, Budgeting, Monitoring/Management Information System Unit takes care of the academic planning, budgeting and monitoring needs of the University and is under the Vice-Chancellor's Office.

The University Central Administration also includes some units that provide common services. They are the Medical and Health Services, the Division of Maintenance Services, the Physical Planning and Development Unit and the Computer Centre; Heads of these units report to the Vice-Chancellor.

1.3.1. Congregation

The Congregation comprises all full-time members of the academic staff and every member of the administrative staff who holds a degree of any recognized university. It discusses and declares an opinion on any matter whatsoever relating to the well-being of the University. It has twelve elected members in Senate and two elected members in the University Council.

1.3.2. Information on Facilities

HEZEKIAH OLUWASANMI LIBRARY

(i) PLAN OF THE LIBRARY

The Library consists of the North and South wings, which are connected by walkways on two levels.

(ii) MEMBERSHIP

Membership of the Library is available, on completion of a registration card, to all students, members of the senior staff of the university and such other persons as may be determined by the Library Committee or the University Librarian on behalf of the Committee.

Students are required to renew their registration at the beginning of each academic year. Library Cards and Borrower's Tickets are not transferable; books issued on them remain the responsibility of the person whose name appears on them.

A Lost Library Card or Borrower's Ticket may be replaced on submission of a written application.

(iii) THE LIBRARY COLLECTION

Hezekiah Oluwasanmi Library now contains over 380,000 volumes. It consists of two main areas:
(a) The undergraduate areas and
(b) The research areas

Serial Collection

The Serials Collection consists of:
(i) Current journals, the most current issues of which are shelved in the display section of the Serials Room.

a. Latest back files i.e. the latest 10 years of journals which are on open access to registered senior staff and postgraduate students.

b. Older back files i.e. journals older than ten years are on closed access to all categories of readers who must obtain and complete request forms at the serials hatch.

2. African Special Collection

The African Special Collection is a collection of rare and other books of primary interest to people whose fields of interest are in African Studies. Staff publications and theses submitted for higher degrees of the University as well as of other universities are also housed there. The Collection is closed access.

3. Documents Collection

The Documents Collection includes official publications of the Federal Government of Nigeria, the old regional governments, the present state governments and the Federal Capital Territory. It also includes publications of other African governments and international organizations.

4. Reference Collection

Dictionaries, encyclopedia, handbooks, directories, atlases, University calendars, etc. are shelved in the Reference Room. Bibliographies, indexes and abstracts are available in the Bibliography Room. Reference books do not ordinarily circulate.

A newspaper clippings file (*post-October; 1985*) and a vertical file of reprints and other pamphlet type materia1are kept in the Reference Room.

5. Reserve Collection

(i) Day reserve collection

Multiple copies of textbooks, particularly some of those recommended for specific courses, are shelved in the Reserve Books Room on Floor 3 North Wing East.

(ii) Two Hour Reserve
Some other materials, periodical articles in particular, are placed on 2-hour reserve. These may be obtained on request (signature and seat number required) and retained for a period of two hours at a time, subject to renewal, provided other readers have not demanded the materials.

6. Recent Accessions
A selection of books added to the Library stock is normally displayed for several days before being put in the main collection. The books may not be borrowed while on display but may be reserved at the Loans Desk.

CATALOGUES
A library catalogue is a finding list of books and other materials available in the library. The following catalogues can be found in the Catalogue Hall:
(i) The Author/Title Catalogue
(ii) The Subject Catalogue
(iii) The Shelf List
(iv) The Serials Catalogue
(v) The Documents Catalogue

HOW TO BORROW A BOOK
When you have found the book you want to borrow, you will be required to sign your name and address on the book card provided in duplicate. You must surrender a Borrower's Ticket for each book borrowed.

When you return a book, you must ensure that you receive your Borrowers Ticket back immediately.

RESERVATION
A book can be reserved by filling a reservation slip; in which case, it will not be renewed for the present borrower when returned, and, if it is already overdue, it will be recalled at once.

INTER-LIBRARY LOAN

If the book you require is not in stock, it is often possible to borrow it from another library. This service is dependent on goodwill and cooperation between libraries, and readers who benefit from it are required to observe the regulations applying to each loan.

PHOTOCOPYING SERVICES

Within the limitations imposed by copyright, the library is able to supply readers with photocopies of periodical articles and parts of books at moderate charges.

PENALTIES FOR OVERDUE OR LOST BOOKS

Penalties for overdue books will he imposed as follows:-

(a) N5.00 per day for the first 30 days; thereafter all loan privilege will stop.

(b) Books specially recalled by the University Librarian will attract a fine of N10.00 per day after third day from the date of recall.

(c) Books lost or damaged will attract a fine five times the current cost of the books.

(d) No student will be allowed to attend the Graduation Ceremony or receive his/her certificate without a clearance certification from the University Library to the effect that no book or fine is outstanding against him or her.

LIBRARY OPENING AND CLOSING HOURS

Monday — Friday	8.00a.m – 8.00p.m
Saturday	8.00 a.m – 4.00 p.m
Sunday	2.00 p.m - 8.00 p.m

Vacation Period

Monday – Friday	8.00 a.m. – 6.00 p. m.

B. Division of Students Affairs

1. Guidance and Counseling Unit:

The Division of Students' Affairs has professional counselors who are committed to helping students grow in self-understanding in the process of integrating their personal and academic experiences. The services are free to students and are confidential (i.e. not used as part of his/her other University records). The services include personal counseling, group counseling, study skills improvement, tests anxiety reduction, personal crisis intervention, psychological testing, career and occupational counseling and settlement of grievances between students. Where necessary, consultations are made with campus organizations, specialists and academic departments, to ensure that students' problems are resolved satisfactorily.

The counselors can be contacted in Rooms 9 and 10, Division of Students' Affairs between 1 0.00 a.m. and 2.00 p.m., Mondays to Fridays.

2. Scholarship and Financial Assistance:

The Division of Students' Affairs serves as a link between students and sponsoring authorities, both within and outside Nigeria. Students are advised to check the Notice Boards in their respective faculties as well as those at the Division of Student Affairs Building for advertisements and other relevant information.

Liaison is also maintained between students and governments at various levels for scholarship and bursaries.

1.3.3 ROLL OF HONOURS FOR STUDENTS

Senate at a Special Meeting held on Wednesday, 1st November 2006 decided that Roll of Honors for Students be instituted in the University to enhance discipline and good performance among students.

All students are enjoined to strive to be on the Honors Roll.

The details are as follows:

(i) The Honors Roll should be at three levels, namely:
(a) Departmental Honors Roll
(b) Provosts/Deans Honors Roll
(c) University/Vice-Chancellor's Honors Roll

(ii) The beneficiaries must have a minimum CGPA of 4.0 for Departmental Honors Roll; 4.25 for Provosts/Deans Honors Roll and 4.5 for Vice-Chancellor's/University Honors Roll in all the faculties except the Faculty of Pharmacy and College of Health Sciences where the candidates are expected to have a cumulative average of 60% and 62% respectively.

(iii) The beneficiary must maintain this grade annually to continue to enjoy the award.

(iv) The recommendations must be processed along with results of Rain Semester examinations.

(v) The student must be of good conduct.

(vi) He/She must not have outstanding or carry-over courses and must not be repeating the year.

(vii) No student on Leave of Absence shall enjoy the Annual Roll of Honors Award.

(viii) No student that has a disciplinary problem shall enjoy the Award.

(ix) The Award shall be based on the recommendation of the Departmental Board of Examiners and the Faculty Board of Examiners, while that pertaining to the Vice-Chancellor/University shall be processed through the Committee of Deans.

(x) Names of beneficiaries shall be displayed as follows:

Departmental Honors	-	*Departmental Notice Board*
Provosts/Deans Honors	-	*Faculty Notice Board*
Vice-Chancellor's/ University Honors	-	*Floor '0' Secretariat Building*

(xi) Each beneficiary shall be given a certificate.

1.4 University Examination Regu1ations

Some University examination regulations students should note as contained in University Examination Regulations for first degrees, diplomas and certificates are:

1.4.1. Registration for University Examinations

(a) A candidate for a University examination must have registered the courses in the prescribed format not later than the closing date prescribed for registration for such courses. Any candidate who fails to register for courses at the appropriate time as prescribed by Senate will not be allowed to take any examination in such courses. Any examination taken without course registration shall be null and void.

(b) Students who register for courses are committed to the number of units registered for and are expected to take examinations in such courses. If a student failed to take an examination he would be scored '0F' for the number of units he had registered for and in which he had failed to take the prescribed examination.

(c) Any student who does not have any course to offer in a particular semester should apply for leave of absence.

(d) A candidate who has less than 15 units in a particular semester to graduate should apply to his/her Faculty Board for permission to register for less than 15 units. Failure to do

so, constitutes a breach of regulation which may result in the non-processing of the candidate's results.

(e) A candidate, who cannot register for courses during the prescribed period for registration because of an illness, must ensure that medical report on his illness is forwarded by him or his parents/sponsors to reach the Dean of his Faculty not later than four weeks after the end of the normal registration period as scheduled in the University Calendar. Such a medical report should be forwarded for authentication by the Director of Medical and Health Services for it to be considered valid. Such a candidate shall be exempted from the penalties of late registration. All applications should be routed through the Head of Department.

(f) Students must attend a minimum of 75% of course instructions including lectures, tutorials and practical where required to qualify to sit for examination in any course.

1.4.2 Absence from Examination

Candidates must present themselves at such University examinations for which they have registered. Candidates who fail to do so for reasons other than illness or accident shall be bound by the following regulations:

(a) Any student who fails to register for courses during one semester without permission should be deemed to have scored "0F" in the minimum number of units required for full time students (i.e. 15 units).

(b) Candidates who registered for courses, attended classes regularly, did all practical and tests but did not take required semester examinations should be given a continuous assessment grade in each of the affected courses and a grade of "0F" in the examination which they should have taken, but which they did not take.

(e) Candidates who have less than 15 units to graduate but fail to take the required examinations should be deemed to have

scored "0F" in the outstanding course only provided such candidates obtained permission to register for less than 15 units.

(d) Any candidate who on account of illness, is absent from a University examination may be permitted by the Senate on the recommendation from the appropriate Faculty Board, to present himself for such examination at the next available opportunity provided that:

(i) A full-time student in the University shall report any case of illness to the University Health Centre at all times.

(ii) When a student falls ill during examination he should report to the Director, Medical and Health Services before attending any hospital outside the University. A report of sickness should be made to the Registrar within a week and a medical certificate of validation of his illness within three weeks.

(iii) When a student falls ill before an examination he shall be under an obligation to send a medical report countersigned by the Director, Medical and Health Services within one week of such illness. Any time outside this period, shall be considered on its merit.

(iv) The Director of Medical and Health Services should within 48 hours, submit a medical report on a candidate who is ill during an examination and is taken to the Health Centre or referred by it to the hospital for treatment.

(v) A candidate applying for leave of absence on medical grounds must forward his application together with a medical report to the Dean of his Faculty through his Head of Department. The medical report must be

countersigned by the Director, Medical and Health Services. All applications for Leave of Absence must be taken by the appropriate Faculty Board.

1.4.3 Examination Offences

(a) A candidate shall not be allowed during an examination to communicate by word or otherwise with any other candidates nor shall he leave his place except with the consent of an invigilator. Should a candidate act in such a way as to disturb or inconvenience other candidates, he shall be warned and if he persists he may, at the discretion of the invigilator be excluded from the examination room. Such action by the invigilator must also be reported in writing through the Head of Department to the Vice-Chancellor within 24 hours.

(b) It shall be an examination offence for any student, staff or any person whatsoever, to impersonate a candidate in any University examination. Any student or staff of the University found guilty under this regulation shall be subjected to disciplinary action by the appropriate authority of the University.

(c) No candidate shall take into an examination room or have in his possession during examination any book or paper or printed or written documents, whether relevant to the examination or not, unless specifically authorized to do so. Any invigilator has authority to confiscate such documents.

(d) Mobile phones are not allowed in examination halls.

(e) A candidate shall not remove from an examination room any papers, used or unused, except the question paper and such book and papers, if any, he is authorized to take into the examination room.

(f) Candidates shall comply with all "direction to candidates" set out on an examination answer booklet or other examination materials supplied to them. They shall also comply with the duration given to them by an invigilator.

(g) Candidates shall not write on any paper other than the examination answer booklets. All rough work must be done in the answer booklets and crossed out neatly. Supplementary answer booklets, even if they contain only rough work must be attached to the inside of the back cover of the booklet.

(h) When leaving the examination room, even if temporarily, a candidate shall not leave his written work on the desk but he shall hand it over to an invigilator. Candidates are responsible for the proper return of their written work.

(i) Smoking shall not be permitted in the examination room during examination sessions.

(j) Any candidate or staff who attempts in any way to unlawfully have or give pre-knowledge of an examination question or to influence the marking of scripts or the award of marks by the University examiner shall be subject to disciplinary action by the appropriate authority of the University.

(k) If any candidate is suspected of cheating, receiving assistance or assisting other candidates or of infringing any other examination regulation, a written report of the circumstance shall be submitted by the invigilator to the Vice-Chancellor within 24 hours of the examination session. The candidate concerned shall be allowed to continue with the examination.

(l) Any candidate suspected of examination malpractice shall be required to submit to the invigilator a written report

immediately after the paper. Failure to make a report shall be regarded as a breach of discipline. Such a report should be forwarded along with the invigilator's report to the Vice-Chancellor.

(m) Where a Head of Department fails to forward a report on examination malpractice to the Vice-Chancellor, such an action would be considered as misconduct.

STUDENT REGISTRATION ON E-PORTAL

Visit e-portal URL directly with www.eportal.oauife.ng

OR

Visit OAU website with www.oauife.edu.ng and click "e-portal" from OAU Home Page

From e-portal Home Page

- click "Payment/Registration (on-line)

From Login Screen

- read additional directives and comply
- click on "Submit" to display your identity for confirmation
- click "OK"
- click again "Payment/Registration (on-line)" to display list of tables of students

From the Table List

- click on "Bio-Data Form" to display "Submit Information Form (MIS2)"
  and fill accordingly

- click "Submit" to save your form.

History of the Department

Introduction

The Governing Council of the Obafemi Awolowo University approved the restructuring of the Faculty of Education on 14th March, 2014. This led to the creation of the Department of Science and Technology Education from the old Department of Special Education and Curriculum Studies that has been in existence since October, 1976 that was put in place by the Provisional Council of the University of Ife (now Obafemi Awolowo University) with the approval of the creation of a Faculty of Education in October, 1967 with only four departments, namely, Department of Education, Department of Adult Education, Institute of Education, and School of General Studies. The 1976 creation of the Faculty of education saw the establishment of departments of Educational Administration (now Department of Educational Management), Educational Technology (now Educational Technology and Library Studies), Educational Foundations and Counselling (which has not changed), Continuing Education (now Adult education and Lifelong Learning), Institute of Education (which has not changed), Physical and health Education (which has not changed) and Special Education and Curriculum Studies(which is now spilt into Science and Technology Education and Arts and Social Science Education).

The B.Sc. (Biology, Chemistry, Physics, and Mathematics) Education programmes, which are located in the Department, are designed to provide academic and professional training for teachers in the nation's secondary schools. The B.Sc. (Education) programmes are structured to produce the right calibre of dedicated professional teachers in both quality and quantity to meet the national curriculum objectives of science education at the secondary school level. Accordingly, students in the Department undergo in-depth courses in both physical (Mathematics, Chemistry and Physics) and Biological (Botany and Zoology) sciences in the Faculties of Science and Education where they

acquire sound and relevant concepts, knowledge, skills and attitudes pertinent to the needs of a changing society. The pedagogical components of the programme are offered in the Faculty of Education which also organises twelve-weeks (six weeks in the second year and another six weeks in the third year) of compulsory and supervised practice teaching exercise coordinated by the Department. Consequently, at the end of the minimum four-year programme (three years minimum for Nigerian Certificate of Education (NCE) graduates from affiliated Colleges of Education), graduates of the Department are deemed to be both professionally and academically prepared to:

(i) teach Biology, Chemistry, Physics, Agric Science, Home Economics, Integrated Science and Mathematics at both the junior and senior secondary school levels and at the non-degree teacher training colleges;
(ii) inculcate in the students the spirit and attitude of inquiry, creativity and the ability to think critically, rationally and effectively in solving personal and professional problems.

Philosophy and Objectives of the Department

In line with the pursuance of the overall aim and objectives of the Faculty of Education, the Department of Science and Technology Education seeks with vigour the aim of training science and Mathematics teachers both at undergraduate and postgraduate levels. The aim of the Faculty of Education, Obafemi Awolowo University, Ile-Ife, is to produce teachers and educators with a solid background in the concept, knowledge and understanding of education and teaching, as well as the application and use of such knowledge for general improvement of themselves and mankind.

Consequently, the Department of Science and Technology Education aims at contributing to the achievement of the goals of the Faculty by training students at both the undergraduate and postgraduate levels. The Department has among its goals, ensuring educational evaluation, carrying out research and

dissemination of research findings in the area of curriculum at all levels and on issues affecting classroom teaching and testing. Undergraduate students are equipped with the necessary knowledge, skills and attitudes for delivering effective lessons in the secondary school. The postgraduate programmes are aimed at producing competent educators in all disciplines as well as equipping students with the knowledge and skills necessary for conducting and evaluating research studies in the fields of curriculum and instruction. As a result, the Department teaches courses in curriculum and instruction to science undergraduate students in the Faculty and to postgraduate students who desire to deepen their knowledge of curriculum and instruction.

Generally, courses offered in curriculum cover issues of theory, design, practice, evaluation, and revision while those in instruction focus science subjects listed in the National Policy on Education and taught in Nigerian secondary schools. Courses offered in the Department are expected to provide adequate professional and academic training for teachers in the nation's secondary and tertiary schools and personnel for other education oriented sectors.

Academic Programmes

(a) Undergraduate level: The Department caters for the science and Mathematics programmes, that is, Education Biology, Education Chemistry, Education Physics and Education Mathematics. The core and elective courses are offered to students of the programme within and outside the Department. All curriculum and instruction-related courses are offered in the Department to this set of students while there are compulsory curriculum and instruction-related courses for science oriented Parts II and III students in the Faculty.

(b) Postgraduate level: At the postgraduate level, the M. Ed, M.Sc. Ed. and Ph. D. degree programmes are offered in the Department. While the M. Ed and Ph.D. programmes are only in Curriculum Studies, the M.Sc.

Ed programme is both in Curriculum Studies and the various disciplines covering the science subjects approved by Government for Nigerian secondary schools. Depending on the programme pursued, core courses are offered to students within and outside the Faculty.

UNDERGRADUATE PROGRAMME OF THE DEPARTMENT

Specifically, courses taught at the undergraduate level by the Department are as follows:

Course Code	Course Title	Units
STE 301	Curriculum Development	2
STE 305	Curriculum Development in Environmental Education	2
STE 320	Introduction to Long Essay	2
STE 300	Biology Teaching Methods	2
STE 302	Chemistry Teaching Methods	2
STE 303	Curriculum for the Exceptional Child	2
STE 304	Mathematics Teaching Methods	2
STE 306	Physics Teaching Methods	2
STE 308	Mathematics/Integrated Science Teaching Methods	2
STE 401	Long Essay	2
STE 402	Education and the Human Environment	2
STE 403	Classroom Testing	2

In addition to teaching courses in curriculum and instruction to all students in the Faculty, the Department houses students offering Mathematics and science courses such as Biology, Chemistry, and Physics. This is done to ensure closer contact with students based

on homogeneity of subjects as well as help these students with administrative issues such as registration of courses, collation of results and computation of grades via the staff advisory system. The students in the Department obtain a B.Sc.Ed. with specialization in their respective subjects. Consequently, the following programs are housed in the Department:

i. B.Sc. Education/Biology
ii. B.Sc. Education/Chemistry
iii. B.Sc. Education/Physics
iv. B.Sc. Education/Mathematics

The Department, in collaboration with the Department of Arts and Social Science Education also houses the teaching practice programme for all Parts II and III students in the Faculty as well as M. Ed students who do not have a degree in Education.

Postgraduate programme

The courses taught in the Department at the postgraduate level are as follows:

STE 601	Theory and Practice in Curriculum Development	3
STE 602	Organization and Supervision of Instruction	3
STE 603	Educational Statistics I	3
STE 604	Techniques in Tests and Measurement	3
STE 605	Introduction to Educational Research Methods	3
STE 606	Principles of Learning and Instruction	3
STE 608	Programmed Learning in Secondary School Curriculum	3
STE 609	Curriculum and Instruction in Secondary School Science	3
STE 610	Diagnostic and Remedial Teaching of Mathematics	3

STE 611	Curriculum and Instruction in Secondary School Science	3
STE 614	Curriculum Building in Science Education	3
STE 619	Principles and Problems of Curriculum Evaluation	3
STE 702	Advanced Learning Theories	3
STE 701	Curriculum Innovation and Improvements	3
STE 704	Principles and Problems of Curriculum Evaluation	3
STE 703	Educational Research Methods II	3
STE 708	University Teaching Methods	3
STE 705	Educational Statistics II	3
STE 626	Statistics and Research in Education	3
STE 707	Elementary School Curriculum	3
STE 79	Secondary School Curriculum	3
STE 711	Principles and Problems of Instruction In Higher Education	3

These courses are taken by postgraduate students leading to eight different degrees, namely,

1. M. Ed (Curriculum Studies)
2. M. Sc. Ed (Curriculum Studies)
3. M. Sc. Ed (Mathematics)
4. M.Sc. Ed (Chemistry)
5. M. Sc. Ed (Physics)
6. M. Sc. Ed (Botany)
7. M. Sc. Ed (Zoology)
8. Ph. D. Education (Curriculum Studies)

Student Enrolment and Development

(a) Undergraduate level: Undergraduate students in the Faculty do not belong to particular Departments in the conventional sense but only for administrative and advisory purposes. Hence, the B.Sc. degrees in Education for the various programmes housed in the Department are jointly awarded

by different Departments. The number of students for which the Department caters in terms of advisory purposes, registration and processing of results varies progressively from year to year. Presently there are about a total of 635 students with 159 students in the B.Sc. Ed (Chemistry), 85 in the B.Sc. Ed. (Physics), 73 in the B.Sc. Ed (Mathematics) and 318 in the B.Sc. Ed. (Biology).

Notably, two students received UNESCO scholarship to complete their studies in the United States of America.

Postgraduate level: The Department has produced many postgraduate students since inception. The number has gradually increased particularly in curriculum and certain subject areas. Presently, the Department has about 70 bonafide postgraduate students at different stages of their programmes. While some of our students' research studies have been published in reputable journals both within and outside the country, some have received recognition with grants by notable bodies and fellowships.

Departmental Growth

The Department has grown over the years in terms of student enrolment, staff strength and programmes offered. In spite of the various courses already developed, programmes are still being developed to meet the challenges of global societal dynamism. The growth in academic programmes has brought about an increase in student enrolment particularly at the postgraduate level. The recognition of Science as a fundamental aspect of development and the consequent emphasis on its importance, as well as Science/Arts ratio stipulated in the National Policy on Education (2007), have contributed in no small measure to increased undergraduate enrolment. Growth in programmes has equally increased staff strength at different levels spanning professors, readers, senior lecturers, lecturers, assistant lecturers and graduate assistants. A number of the products of the Department who are qualified are appointed as lecturers, which is a

strong index of the quality of the programmes offered in the Department and of growth. The increase in students and staff is not limited to numerical growth as both staff and students have availed themselves of various local and international fellowships and grants to develop themselves academically.

Research

The Department continues to place premium on quality research. Individually, members of staff continue to carry out research primarily in the areas of curriculum, learning and instruction in various disciplines of interest. Such research outcomes are published in reputable local and international journals. Several have written or contributed to books that focus issues in curriculum and allied disciplines. In addition, research has been further disseminated in a Departmental book recently published in Ghana. Presently, an editor for books for the tertiary level in the United States of America has commissioned the Department to write a book in curriculum and groundwork has already started. Equally, groundwork has started on the Departmental journal. Members are also involved in writing textbooks for secondary school students in various disciplines.

Also as a means of disseminating research, members of staff participate in both local and international conferences. Some are actually involved in organising seminars and workshops for different educational-focused establishments.

Services to the Community

Members of staff offer their services to the community in different ways. Many participate in the moderation of examination questions and scripts, teaching practice exercise of the University undergraduate and postgraduate programmes offered at Adeyemi College of Education, Ondo and some other universities. Some render different services to other colleges of Education and primary and secondary schools. Some serve as consultants to federal agencies such as the Universal Basic Education Commission (UBEC) and National Agency for Prohibition of

Traffic in Persons (NAPTIP). Some are consultants to federal government parastatals and some international organisations. Some serve as Board members of educational institutions and resource persons in various workshops and conferences.

In order to impact the community positively and bridge the gap between the town and the gown, members through the 'Ife School Curriculum Improvement Group' housed in the Department, go to schools to show practicing teachers who are unable to go out for workshops due to their inability to pay for such workshops, how to teach following best practices by organising sample lessons.

Staff Strength

The academic staff strength of the Department consists of the following 6 members:

Professor	-	1
Reader	-	2
Senior Lecturer	-	1
Lecturer I	-	2
Lecturer II	-	2

And 18 other associate lecturers

Facilities

The Department has offices that are basically well-furnished and adequate for research all other things being equal. The offices have internet facilities though the Department has not been able to furnish every member with computers or laptops. There are however computers in the Departmental office. The purchase of a photocopying machine has contributed to speedy processing of papers within and outside the Department. In addition, the Department has a resource and demonstration room in honour of the Late Dr (Mrs) O. O. Dibu-Ojerinde, a former Acting Head of Department who was passionate about the teaching profession. Some computers and printers were donated to the Department by her family. There is also a science laboratory, for science students to be taught methods of teaching science. A generating set was

donated to the Department by a postgraduate student. This has helped to minimise, not eradicate, the problems faced by the challenge of incessant power outage on campus.

Admission Requirements:

1. **Four-year Degree Programme**
   Requirements for students seeking admission into the four-year B.Sc. Honors degree in Education/Science and Education/Mathematics, through the WAEC are those for entry into the University and the Faculty of Science. The qualifying subjects must include credit level passes in the discipline in which the student hopes to specialize with at least one other science subject in addition to Mathematics and English at the Ordinary Level of the General Certificate of Education, Senior Secondary School Certificate or its equivalent. Those to be admitted for B. Sc. Ed. /Mathematics are expected to have credit level pass in Mathematics and English in at most two sittings with three other science subjects. Admission is also based on an acceptable pass level in the UME and post UME examinations.

Direct Entry

(a) Candidates seeking admission by Direct Entry must pass G.C.E. A/L subjects. In addition, candidates must possess at least three other subjects at credit level including English and Mathematics

(b) They must have at least two passes at the merit level at the N.C.E. in relevant/principal subjects. In addition, candidates must possess at least three other subjects at the credit level at the Senior School Certificate level or its equivalent, including English Language and Mathematics.

(c) They must have a merit pass in two relevant/principal subjects at the N.C.E. level from affiliated Colleges of

Education plus three other subjects passed at the credit level at the Senior School Certificate level or its equivalent.

Requirements and Eligibility for the Award of Degree:
The minimum requirement for the award of B.Sc. Education Honours degree in Science and Mathematics is satisfactory completion of not less than 140 units of coursework for UME candidates and 120 units for Direct entry students. Students who are admitted into Part II of the B.Sc./Education programme must satisfactorily complete 120 units of coursework. In addition, at least 12 units of Special Electives must be passed. Two teaching practice sessions must be undertaken during two long vacation periods for Parts II and III students.
3 years are required for Direct entry candidates
4 years are required for UME candidates

Student Work Load:
(i) Each course shall run for one semester.
(ii) Work load is defined in terms of course unit.
(iii) One unit represents one hour of lecture or one hour of or 2-4 hours of practical work per week throughout a semester.
(iv) Normally, a candidate shall not be required to enroll for more than 24 units course work in any semester.

Registration for Courses:
(i) Each candidate must complete the registration for a semester within the period prescribed for registration.
(ii) Any addition to or reduction in the courses for which a student is formerly registered must be made with the consent of the Head of Department. Such alterations must be effected within the approved registration period and on the prescribed form.

Withdrawal from Courses:
(i) A student may withdraw, only with approval from the Dean of the Faculty, from a course for which he is registered without the penalty of a grade of F.

(ii) Permission to withdraw must be sought by completing a Withdrawal Form, countersigned by the Head of Department.
(iii) Withdrawal without penalty will be granted up to the end of the fourth week from the commencement of the semester in which the course is offered.
(iv) Unauthorized withdrawal will earn the candidate the grade of F.

Pattern of Examination:
Each course shall be examined at the end of the semester in which it is taught. The examination shall be conducted as prescribed by the Faculty of Education.

(i) Each course shall normally be examined by a theory paper of 1-3 hours in addition to which there may be practical and/or an oral examination.

Measurement of Performance
Performance in a course shall be measured by the results of prescribed theory and practical examination and/or assessment of such essay, practical exercises and reports prescribed for each course.

Release of Examination Results
(i) At the end of each semester, a provisional list of successful candidates in course examinations shall be published by the Registrar soon after the recommendation of the Faculty Board to Senate.
(ii) The final results of the candidates for the award of the Certificate shall be published by the Registrar after they have been approved by Senate.

Repeat Courses
A student may repeat only those courses in which he has obtained grade of F. The grade earned for a repeated course will be recorded

and used in the computation of the grade point average in the usual way.

Illness
Candidates who are prevented by genuine illness from appearing in the semester examination shall be required to write such paper(s) at the next available opportunity and without penalty provided the candidates have lodged a report within reasonable time before the examination and have also produced satisfactory medical evidence from the University Health Centre.

Probation and Withdrawals:
A student who fails to reach a cumulative grade point average of 1.00 at the end of one semester shall be placed on probation during the second semester. If he fails to achieve a cumulative grade point average of at least 1.00 at the end of the second semester, he shall be required to withdraw from the Faculty.

Definition of Terms

Student Workload: This is defined in terms of course units. One unit represents one hour of lecture or one hour of tutorial or 2-4 hours practical work per week throughout a semester. Thus for example, a course in which there are two hours of lectures and one hour of tutorial per week is a 3 unit course.

Total Number of Units (TNU): This is the total number of course units carried by a student in a particular semester. It is the summation of the units on all courses carried during the semester. For example, a student who is carrying 6 courses of 3 units each has a TNU of 18 for that semester. No student shall be allowed to carry (i.e. register for) or be examined in more than 24 units in any particular semester.

Cumulative Number of Units (CNU): This is the summation of the total number of units in all the semesters from the beginning to date. A student who is prone to repeating courses will finish (if

he/she does not drop out) with a higher CNU than non-repeating colleagues and will most likely require a longer time to complete requirements for the award of the degree.

Level of Performance and Rating (Credit Points per Unit): A candidate shall be recorded as having attained in a course a level of achievement grades as follows:

A	=	Excellent	70%-100%	5
B	=	Very Good	60%-69%	4
C	=	Good	50%-59%	3
D	=	Satisfactory	45%-49%	2
E	=	Adequate	40%-44%	1
F	=	Failure	0%-39%	0

Based on the above, a student who obtained a grade of 'A' in a 4-unit course has scored 20 credit points and one who obtained a grade of C in that course has scored 12 credit points.

Total Credit Points (TCP): This is the sum of the products of the course units and
rating in each course for the entire semester period. For example, if a student who took 4 courses of 5 units each obtains the grades of C, B, F and D respectively in the four courses, the TCP of this student will be 5x3+5x4+5x0+5x2=45.

Cumulative Credit Point (CCP): This is the summation of the Total Credit Points over all semesters from beginning to date.
Grade Point Average (GPA): This is the Total Credit Points (TCP) divided by the Total Number of Units (TNU). For example, the TCP for the student's scores referred to above is 45. His/Her TNU is 20 (i.e. 4x5 being 4 courses at 5 units each) for the semester. The highest GPA that can be earned is 5.0 and that is when a student has earned a grade of 'A' in every course during the semester. The lowest GPA obtained is 0.0 and this would happen if the student has 'F' all round during the semester.

Cumulative Grade Point Average (CGPA): This is the summation of TCPs for all semesters, divided by the summation of TNUs for

the said semesters. Like the GPA, CGPA obtained ranges from 0 to 5.

Assessment and Award of Degrees

A student's workload is defined in terms of course units. One unit represents one hour of lecture or one hour of tutorial or 2-4 hours of practical work per week throughout a semester. All courses shall run for one semester of a full session of two semesters.

The final grade and the class of the degree shall be based on Cumulative Grade Point Average (CGPA) obtained by each candidate in all prescribed courses approved by the University. The final cumulative grade point average shall be calculated on the basis of the total number of credit points and total number of course units registered for during the course of the student's program. In the case of a failed course, the candidate must repeat the course at the next available opportunity. If the course is an elective the candidate may substitute another course and shall not be required to pass the failed elective course. If the course is a restricted elective, substitution can only be made from the list of restricted electives. The failed grade would however be reflected in the transcript.

A candidate who has satisfactorily completed all requirements for the degree with an overall grade point average of not less than 1.50 shall be awarded the Honors degrees as indicated below:

First Class	4.50	-	5.00
Second Class (Upper Division)	3.50	-	4.49
Second Class (Lower Division)	2.40	-	3.49
Third Class	1.50	-	2.39
Pass	1.00	-	1.49

Passes in 12 units of Special Electives is a requirement for graduation. A candidate who scores a cumulative grade point average (CGPA) of less than 1.00 in two consecutive semesters shall be required to withdraw from the University.

University Special Electives
Students are required to complete 12 units of Special Elective courses offered in other Faculties as prescribed:

SER 001, SER 002, SEL 001, SEL 002, SEM 001, SEM 002, SEG 001, SEG 002, SEH 001, SEH 002, SET 001, SET 002, SEP 001, SEP 002, SEA 001, SEA 002, SEO 001, SEO 002, SEO 003, and SEO004.

OUTLINE OF ACADEMIC PROGRAMMES

B.Sc. Education (Biology)
Part I Harmattan Semester

COURSE CODE	C OURSE TITLE	CONTACT HOURS			
		L	T	P	U
BOT 101	Introductory Botany I	3	0	0	3
BOT 103	Experimental Botany I	0	0	3	1
CHM 101	Introductory Chemistry I	3	1	3	4
CHM 103	Experimental Chemistry I	0	0	3	1
MTH 105	Mathematics for Biological Sciences I	3	1	0	4
ZOO 101	Introductory Zoology	3	0	0	3
ZOO 103	Experimental Zoology I	0	0	3	1
EDU 101	Introduction to the Teaching Profession	2	0	0	2
	Any special elective outside the Faculty	2	0	0	2
					21

B.Sc. Education (Biology)
Part I Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
BOT 102	Introductory Botany II	3	0	0	3
BOT 104	Experimental Botany II	0	0	3	1
CHM 102	Introductory Chemistry II	4	1	0	4
CHM 104	Experimental Chemistry II	0	0	3	1
ZOO 102	Introductory Zoology II	3	0	0	3
ZOO 104	Experimental Zoology II	0	0	3	1
EDU 102	Principles and Practice of Education	2	0	0	2
	Any special elective outside the Faculty	2	0	0	2
					17

B.Sc. Education (Biology)
Part II Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
CHM 205	Experimental Physical and Inorganic Chemistry	0	0	4	1
CHM 207	Physical and Inorganic Chemistry	3	1	0	4
BOT 201	Form and Function in Plants II	2	0	3	3
ZOO 201	Principles of Animal Systematics	2	0	3	3
EFC 201	Historical Foundations of Education	2	0	0	2
EFC 203	Psychological Foundations of Education	2	0	0	2
CSC 201	Computer Programming I	2	0	0	2
	Any elective from the following:				
ALL 201	Introduction to Adult Education	2	0	0	2
ALL 203	Introduction to Non-formal				

	Education	2	0	0	2
ALL 205	Introduction to Community Development	2	0	0	2
ALL 207	Functional Literacy	2	0	0	2
	Any one special elective outside the Faculty	2	0	0	2
					21

B.Sc. Education (Biology)
Part II Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
CHM 202	Basic Organic Chemistry	3	1	0	4
CHM 206	Experimental Organic Chemistry	0	0	4	1
BOT 204	Plant Morphology	2	0	3	3
ZOO 204	Forms and Function in Animals	2	0	0	3
EFC 202	Philosophical Foundation of Education	2	0	0	2
ASE 202	Curriculum and Instruction	2	0	0	2
ETL 202	Introduction to Educational Technology	2	0	0	2
EDU 202	Teaching Practice I (Long Vacation: 3 Units)	0	0	0	0
	Any two special electives outside the Faculty	4	0	0	4
					21

B.Sc. Education (Biology)
Part III Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
STE 301	Curriculum Development	2	0	0	2
EFC 301	Introduction to Guidance and Counseling	2	0	0	2
EFC 303	Tests and Measurement	2	0	0	2
ZOO 301	Comparative Animal Physiology	2	0	3	3
BOT 203	Introductory Genetics	3	0	3	4
BOT 303	Angiosperm Taxonomy	2	0	3	3
EDU 202	Teaching Practice I (Reported)	0	0	9	3
	Any special elective outside the Faculty	2	0	0	2
					21

B.Sc. Education (Biology)
Part III Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EFC 302	Developmental Psychology	2	0	0	2
STE 300	Biology Teaching Methods	2	0	0	2
STE 320	Research Methods & Statistics	2	0	0	2
CSC 202	Computer Programming II	1	0	3	2
ZOO 302	Entomology I	2	0	3	3
BOT 302	Plant Anatomy	2	0	3	3
BOT 301	Whole Plant Physiology	3	0	3	3
EDU 302	Teaching Practice II (Long Vacation: 3 Units)	0	0	0	0
	Any special elective outside the Faculty	2	0	0	2
					19

B.Sc. Education (Biology)
Part IV Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
STE 401	Research Project (Long Essay)	0	0	0	2
EFC 413	Sociology of Education	2	0	0	2
BOT 305	Autecology	2	0	3	3
STE 403	Tests and Measurement	2	0	0	2
ZOO 401	Comparative Vertebrate Anatomy	2	0	3	3
ZOO 401	Animal Behavior	2	0	3	3
EDU 302	Teaching Practice II (Reported)	0	0	9	3
	One elective from the following:				
ETL 407	Introduction to Comparative Adult Education	2	0	0	2
ETL 403	Organisation and Administration of Adult Education	2	0	0	2
EFC 403	Introduction to Educational and Psychological Testing	2	0	0	2
STE 303	Curriculum for the Exceptional Child	2	0	0	2
ASE 405	Testing Ethics	2	0	0	2
ALL 405	Learning, Teaching and Communication	2	0	0	2
EFC 405	Techniques of Counseling	2	0	0	2
EFC 411	Test Development and Administration	2	0	0	2
IED 411	Curriculum & Instructional Strategy in Teacher Education	2	0	0	2
DEM 301	School Community Relations	2	0	0	2
DEM 303	The Nigerian Educational System	2	0	0	2
					20

B.Sc. Education (Biology)
Part IV Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
DEM 402	School Management	2	0	0	2
BOT 202	Biometry	2	0	0	3
BOT 304	Systematic of Non-flowering Plants	2	0	3	3
ZOO 304	Animal Ecology	2	0	3	3
ZOO 310	Biology of Reproduction	2	0	3	2
	One elective from the following:				
ALL 402	Mass Media and Distance Learning	2	0	0	2
ALL 404	Rural Education	2	0	0	2
ALL 406	Planning of Adult Education Programme	2	0	0	2
EFC 402	Organisation of Counseling Services	2	0	0	2
EFC 404	History of Education	2	0	0	2
EFC 406	Introduction to Vocational Testing	2	0	0	2
EFC 408	Sex, Family and Marital Counseling	2	0	0	2
EFC 412	Comparative Education	2	0	0	2
IED 402	Introduction to Early Childhood Education	2	0	0	2
STE 402	Education and the Human Environment	2	0	0	2
ETL 402	Radio Television and Film Utilization	2	0	0	2
ASE 404	Curriculum Evaluation	2	0	0	2
DEM 302	Educational Administration	2	0	0	2
	Any special elective outside the Faculty	2	0	0	2
					17

B.Sc. Education (Chemistry)
Part I Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EDU 101	Introduction to Teaching Profession	2	0	0	2
CHM 101	Introductory Chemistry	2	0	0	4
MTH 101	Elementary Mathematics	4	1	0	5
PHY 101	General Physics I	3	0	4	3
PHY 107	Experimental Physics I	2	0	4	3
CHM 103	Experimental Chemistry I	0	0	3	1
	Any special elective outside the Faculty	2	0	0	2
					20

B.Sc. Education (Chemistry)
Part I Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EDU 102	Principle and Practice of Education	2	0	0	2
PHY 102	General Physics II	3	0	0	4
PHY 108	Experimental Physics IB	3	0	4	1
CHM 102	Introductory Chemistry II	3	1	3	4
MTH 102	Elementary Mathematics II	3	1	0	5
CHM 104	Experimental Chemistry II	0	0	3	1
	Any special elective outside the Faculty	2	0	0	2
					19

B.Sc. Education (Chemistry)
Part II Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
CHM 201	Basic Inorganic Chemistry	3	1	0	4
CHM 203	Basic Physical Chemistry	3	1	0	4
CHM 205	Experimental Physical Inorganic Chemistry	0	0	4	1
MTH 201	Mathematical Methods I	3	1	0	4
PHY 203	Electric Circuits and Electronics	3	0	0	3
EFC 201	Historical Foundations of Education	2	0	0	2
EFC 203	Psychological Foundations of Education	2	0	0	2
	Any elective from the following:				
ALL 201	Introduction to Adult Education	2	0	0	2
ALL 203	Introduction to Non-formal Education	2	0	0	2
ALL 205	Introduction to Community Development	2	0	0	2
ALL 207	Functional Literacy	2	0	0	2
					22

B.Sc. Education (Chemistry)
Part II Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
CHM 202	Basic Inorganic Chemistry	3	1	0	4
CHM 206	Experimental Organic Chemistry I	0	0	3	3
CHM 208	Introductory Analytical Chemistry	1	1	0	2
MTH 202	Mathematical Methods II	3	1	0	4
EFC 202	Philosophical Foundations of				

	Education	2	0	0	2
ASE 202	Curriculum and Instruction	2	0	0	2
EDU 202	Teaching Practice (Long Vacation: 3 Units)	0	0	0	0
	Any two special electives outside the Faculty	4	0	0	4
					22

B.Sc. Education (Chemistry)
Part III Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
CHM 305	Chemical Kinetics	1	1	0	2
CHM 307	Application of Spectroscopy	2	1	0	3
CHM 309	Experimental Physical Chemistry	0	0	6	2
EFC 301	Introductory to Guidance and Counseling	2	0	0	2
EFC 303	Tests and Measurement	2	0	0	2
STE 301	Curriculum Development	2	0	0	2
CSC 201	Computer Programming I	2	0	3	3
EDU 202	Teaching Practice I (Reported)	0	0	9	3
	Any one special elective outside the Faculty	2	0	0	2
					21

B.Sc. Education (Chemistry)
Part III Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
CHM 302	Structure and Main Group Inorganic Chemistry	3	1	0	4
CHM 304	Thermodynamics	3	1	0	2
CHM 306	Aromatic and Heterocyclic Chemistry	1	1	0	2
CHM 312	Experimental Organic Chemistry II	0	0	6	2

CHM 316	Experimental Organic Chemistry	0	0	6	2
STE 320	Introduction to Research Methods	2	0	0	2
STE 302	Special Methods in Chemistry	2	0	0	2
EFC 302	Developmental Psychology	2	0	0	2
CSC 202	Computer Programming II	1	0	3	2
EDU 302	Teaching Practice II (Long Vacation 3 Units)	0	0	0	0
	Any one special elective outside the Faculty	2	0	0	2
					22

B.Sc. Education (Chemistry)
Part IV Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
CHM 401	Transition Metal Chemistry	3	1	0	4
EFC 413	Sociology of Education	2	0	0	2
STE 403	Classroom Testing	2	0	0	2
STE 401	Long Essay	2	0	0	2
EDU 302	Teaching Practice II (Reported)	0	0	9	3
	Plus any one elective from the following:				
ALL 401	Introduction to Comparative Adult Education	2	0	0	2
ALL 403	Organisation and Administration of Adult Education	2	0	0	2
EFC 403	Introduction to Educational and Psychological Testing	2	0	0	2
EFC 409	Introduction to Educational Evaluation	2	0	0	2
STE 303	Curriculum for the Exceptional Child	2	0	0	2
ASE 405	Testing Ethics	2	0	0	2
ALL 405	Learning, Teaching and Communication	2	0	0	2

EFC 411	Test Development and Administration	2	0	0	2
	Any one special elective outside the Faculty	2	0	0	2
					17

B.Sc. Education (Chemistry)
Part IV Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS L	T	P	U
CHM 402	Organometallic	2	1	0	3
CHM 408	Organic Reactions and Syntheses	2	1	0	3
CHM 314	Heterocyclic, Bi-functional Aliphatic and Terpenoid Compounds	2	1	0	2
CHM 308	Natural and Synthetic Macromolecules	2	0	0	2
DEM 402	School Management	2	0	0	2
	Plus any two electives from the following:				
EFC 408	Sex, Family and Marital Counseling	2	0	0	2
ETL 404	Computer Literacy	2	0	0	2
ALL 404	Rural Education	2	0	0	2
EFC 402	Organization of Guidance Service	2	0	0	2
EFC 404	History of Education	2	0	0	2
ALL 402	Mass Media and Methods of Distance	2	0	0	2
EFC 412	Comparative Education	2	0	0	2
STE 404	Curriculum Evaluation	2	0	0	2
DEM 202	School Organization	2	0	0	2
STE 402	Education and the Human Environment	2	0	0	2
ETL 302	Basic Instructional Design	2	0	0	2
EFC 406	Introduction to Vocational				

	Testing	2	0	0	2
	Any one special elective outside the Faculty	2	0	0	2
					18

B.Sc. Education (Physics)
Part I Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EDU 101	Introduction to Teaching Profession	2	0	0	2
PHY 101	General Physics I	3	1	0	3
PHY 107	Experimental Physics	0	0	3	1
CHM 101	Introductory Chemistry	3	1	4	5
CHM 103	Experimental Chemistry I	0	0	3	1
MTH 101	Elementary Mathematics I	4	1	0	5
	Any special elective outside the Faculty	2	0	0	2
					19

B.Sc. Education (Physics)
Part I Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EDU 102	Principles and Practice of Education	2	0	0	2
PHY 102	General Physics II	3	1	0	4
PHY 108	Experimental Physics IB	0	0	3	1
CHM 102	Introductory Chemistry II	3	1	4	5
CHM 104	Experimental Chemistry II	0	0	3	1
MTH 102	Elementary Mathematics II	4	1	0	5
	Any special elective outside the Faculty	2	0	0	2
					20

B.Sc. Education (Physics)
Part II Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
PHY 201	Classical Mechanics I	2	0	0	2
PHY 203	Electric Circuits and Electronics	3	0	0	3
PHY 205	Introductory Modern Physics	3	0	0	3
PHY 207	Experimental Physics	0	0	3	1
CSC 201	Computer Programming I	2	0	3	3
MTH 201	Mathematical Methods I	3	1	0	4
EFC 201	Historical Foundations of Education	2	0	0	2
EFC 203	Psychological Foundations of Education	2	0	0	2
	One elective from				
ALL 201	Introduction to Adult Education	2	0	0	2
ALL 203	Introduction to Non-formal Education	2	0	0	2
ALL 205	Introduction to Community Development	2	0	0	2
ALL 207	Functional Literacy	2	0	0	2
					22

B.Sc. Education (Physics)
Part II Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EFC 202	Philosophical Foundations of Education	2	0	0	2
ASE 202	Curriculum and Instruction	2	0	0	2
ETL 202	Introduction to Educational Technology	2	0	0	2
PHY 202	Introduction to Environmental Physics	3	0	0	3

PHY 206	Modern Physics	3	0	0	3
PHY 208	Experimental Physics IIB	0	0	3	1
MTH 202	Mathematics Methods II	3	1	0	4
EPH 204	Energy and Society	1	0	0	1
EDU 202	Teaching Practice I (Long Vacation 3 Units)	0	0	0	0
CSC 202	Computer Programming II	1	0	3	2
	Any one special elective outside the Faculty	2	0	0	2
					22

B.Sc. Education (Physics)
Part III Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
STE 301	Curriculum Development	2	0	0	2
EFC 303	Tests and Measurement	2	0	0	2
EFC 301	Introduction to Guidance and Counseling	2	0	0	2
PHY 301	Mathematical Physics I	3	0	0	3
PHY 303	Electromagnetism I	3	0	0	3
PHY 305	Thermodynamics & Kinetic Theory	3	0	0	3
PHY 307	Experimental Physics IIIA	0	0	6	2
EDU 202	Teaching Practice I (Reported)	0	0	9	3
	Any special elective outside the Faculty	2	0	0	2
					22

B.Sc. Education (Physics)
Part III Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EFC 302	Developmental Psychology	2	0	0	2
STE 304	Special Methods in Physics	2	0	0	2
STE 320	Introduction to Long Essay	2	0	0	2
PHY 302	Classical Mechanics II	3	0	0	3
PHY 304	Electromagnetism II	3	0	0	3
PHY 306	Optics	3	0	0	3
PHY 308	Experimental Physics IIIB	0	0	6	2
EDU 202	Teaching Practice II (Long Vacation 3 units)	0	0	0	0
	Any special elective outside the Faculty	4	0	0	4
					21

B.Sc. Education (Physics)
Part IV Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
STE 401	Research in Education	0	0	2	2
EFC 413	Sociology of Education	2	0	0	2
PHY401	Mathematical Physics II	3	0	0	3
PHY405	General Solid State Physics I	4	0	0	4
PHY431	Atmospheric Physics I	3	0	0	3
STE 403	Classroom Testing	2	0	0	2
EDU302	Teaching Practice II (Reported)	0	0	9	3
	One elective from the following				
ALL 407	Introduction to Comparative Adult Education	2	0	0	2
ALL 403	Organization and Administration of Adult Education	2	0	0	2
EFC 403	Introduction to Educational and				

	Psychological Testing	2	0	0	2
EFC 409	Introduction to Educational Evaluation	2	0	0	2
STE 303	Curriculum for the Exceptional Child	2	0	0	2
ASE 405	Testing Ethics	2	0	0	2
IED 411	Curriculum and Instructional Strategy in Teacher Education	2	0	0	2
ETL 402	Radio, TV and Film Utilization	2	0	0	2
DEM 301	School Community Relations	2	0	0	2
DEM 303	The Nigerian Educational System	2	0	0	2
					21

B.Sc. Education (Physics)
Part IV Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
DEM 402	School Management	2	0	2	2
ETL 404	Computer Literacy	2	0	0	2
PHY 432	Atmospheric Physics II	3	0	0	3
PHY 435	Remote Sensing	3	0	0	3
MTH 212	Mechanics	2	1	0	3
	Any two electives from the following:				
ALL 404	Rural Education	2	0	0	2
EFC 402	Organization of Guidance Services	2	0	0	2
EFC 404	History of Nigerian Education	2	0	0	2
ALL 402	Mass, Media and Distance Learning	2	0	0	2
IED 402	Introduction to Early Childhood Education	2	0	0	2
STE 402	Education and the Human Environment	2	0	0	2
EFC 412	Comparative Education	2	0	0	2
DEM 202	School Organization	2	0	0	2

ETL 302	Basic Instructional Design	2	0	0	2
ALL 406	Planning of Adult Education Program	2	0	0	2
ASE 404	Curriculum Evaluation	2	0	0	2
EFC 406	Introduction to Vocational Testing	2	0	0	2
EFC 408	Family, Sex, and Marital Counseling	2	0	0	2
	Any special elective outside the Faculty	2	0	0	2
					19

B.Sc. Education (Mathematics)
Part I Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EDU 101	Introduction to Teaching Profession	2	0	0	2
MTH 101	Elementary Mathematics I	4	1	0	5
PHY 101	General Physics I	3	0	0	3
CHM 101	Introductory Chemistry IA	3	1	4	4
CHM 103	Experimental Chemistry I	0	0	3	1
PHY 107	Experimental Physics IA	0	0	3	1
	Any special elective outside the Faculty	2	0	0	2
					18

B.Sc. Education (Mathematics)
Part I Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EDU 102	Principle and Practice of Education	2	0	0	2
MTH 102	Elementary Mathematics II	4	1	0	5
MTH 104	Vectors	2	0	0	2
PHY 102	General Physics I	3	0	0	3
CHM 102	Introductory Chemistry	3	1	3	5

CHM 104	Experimental Chemistry II	0	0	3	1
PHY 108	Experimental Physics IB	0	0	3	1
	Any special elective outside the Faculty	2	0	0	2
					21

B.Sc. Education (Mathematics)
Part II Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS L	T	P	U
EFC 201	Historical Foundations of Education	2	0	0	2
EFC 203	Psychological Foundation of Education	2	0	0	2
MTH 201	Mathematical Methods I	3	1	0	4
MTH 205	Introduction to Algebra	2	1	0	3
MTH 207	Logic, Sets and Real Number System	2	1	0	3
MTH 211	Introduction to Mechanics	2	0	0	2
	One elective from the following:				
ALL 205	Introductory to Community Development	2	0	0	2
ALL 207	Functional Literacy.	2	0	0	2
ALL 201	Introduction to Adult Education	2	0	0	2
ALL 203	Introduction to Non-formal Education	2	0	0	2
	Any special elective outside the Faculty	2	0	0	2

B.Sc. Education (Mathematics)
Part II Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EFC 202	Philosophical Foundations of Education	2	0	0	2
ASE 202	Curriculum and Instruction	2	0	0	2
DET 202	Introduction to Educational Technology	2	0	0	2
MTH 202	Mathematical Methods II	3	1	0	4
MTH 206	Introduction to Numerical Analysis	3	0	0	3
MTH 212	Mechanics	2	1	0	3
MTH 208	Introductory Analytical Chemistry	2	1	0	3
EDU 202	Teaching Practice I (Long Vacation 3 Units)	0	0	0	0
	Any special elective outside the Faculty	2	0	0	2

B.Sc. Education (Mathematics)
Part III Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
SET 301	Curriculum Development	2	0	0	2
EFC 301	Introductory to Guidance and Counseling	2	0	0	2
EFC 303	Tests and Measurement	2	0	0	2
MTH 301	Functions of a Complex Variable	2	0	0	2
MTH 303	Advanced Calculus	2	0	0	2
MTH 309	Electromagnetic Theory I	2	0	0	2
MTH 311	Linear Algebra	2	1	0	3
CSC 201	Computer Programming I	2	0	3	3
EDU 202	Teaching Practice I (Reported)	0	0	9	3
					21

B.Sc. Education (Mathematics)
Part III Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
EFC 302	Developmental Psychology	2	0	0	2
STE 306	Mathematics Teaching Methods	2	0	0	2
STE 320	Research Methods and Statistics	2	0	0	2
MTH 302	Mathematical Methods IV	2	1	0	3
MTH 314	Real Analysis	3	1	0	2
MTH 306	Groups and Rings	2	1	0	3
MTH 310	Hydro-Mechanics	2	1	0	3
CSC 202	Computer Programming II	1	0	3	2
EDU 302	Teaching Practice II (Long Vacation 3 Units)	0	0	0	0
	Any one special elective outside the Faculty	2	0	0	2
					21

B.Sc. Education (Mathematics)
Part IV Harmattan Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
STE 401	Research Project (Long Essay)	0	0	6	2
EFC 413	Sociology of Education	2	0	0	2
MTH 423	Numerical Analysis I	2	1	0	3
MTH 305	Vectorial Mechanics	2	1	0	3
STE 403	Classroom Testing	2	0	0	2
EDU 302	Teaching Practice II (Reported)	0	0	9	3
	Any one from the following:				
MTH 401	General Topology	2	1	0	3
MTH 403	Measure Theory and Integration	2	1	0	3
MTH 417	Fluid Dynamics II	2	1	0	3
MTH 409	Theory of Ordinary Differential				

	Equations	2	1	0	3
MTH 407	Complex Analysis II	2	1	0	3
MTH 405	Galois Theory	2	1	0	3
	Plus any one elective from the following:				
ALL 407	Introduction to Comparative Adult Education	2	0	0	2
ALL 403	Organisation and Administration of Adult Education	2	0	0	2
EFC 409	Introduction to Educational Evaluation	2	0	0	2
EFC 405	Techniques of Counseling	2	0	0	2
ALL 405	Learning Teaching and Communication	2	0	0	2
STE 303	Curriculum for the Exceptional Child	2	0	0	2
ASE 405	Testing Ethics	2	0	0	2
IED 411	Curriculum and Instructional Strategies in Teacher Education	2	0	0	2
					20

B.Sc. Education (Mathematics)
Part IV Rain Semester

COURSE CODE	COURSE TITLE	CONTACT HOURS			
		L	T	P	U
DEM 402	School Management	2	0	0	2
MTH 424	Numerical Analysis II	2	1	0	3
MTH 316	OR Waves	2	0	0	2
MTH 318	Theory of Numbers	2	1	0	2
CSC 208	Computer Technology	1	0	3	2
	Any one from the following:				
MTH 402	Algebraic Topology	2	1	0	2
MTH 418	Fluid Dynamics II	2	1	0	3

MTH 406	Commutative Algebra	2	1	0	3
	Plus any two electives from the following:				
EFC 402	Organization of Guidance Service	2	0	0	2
EFC 404	History of Education	2	0	0	2
EFC 412	Comparative Education	2	0	0	2
ALL 404	Rural Education	2	0	0	2
ALL 402	Mass Media and Methods of Distance	2	0	0	2
ASE 404	Curriculum Evaluation	2	0	0	2
ETL 302	Basic Instructional Design	2	0	0	2
STE 402	Education and the Human Environment	2	0	0	2
EFC 406	Introduction to Vocational Testing	2	0	0	2
EFC 408	Sex, Family and Marital Counseling	2	0	0	2
	Any two special electives outside the Faculty	4	0	0	4
					20

COURSE DESCRIPTION

EDU 202 Teaching Practice I

About six weeks during long vacation following the completion of Part Two courses

- Supervised observation of Classroom practices
- Classroom interaction analysis and discussion

Evaluation of Student-Teachers

- Appraising the student-teacher' personality
- Appraising the student-teachers' ability and intelligences
- Appraising the student-teachers' knowledge

Evaluating Teaching

- The Student-Teacher and his/her pupils
- The Student-Teacher himself/herself
- The Student-Teacher and school record
- The Student-Teacher and Special problem of teaching

STE 301: Curriculum Development

The Curriculum in relation to its:-

- Definition
- Meaning and specific objectives
- Pro-requisites of a good curriculum
- The fundamental factors that determine the planning and development of curriculum.

The Curriculum in relation to its:-

- Historical Foundation in Nigeria
- The influence of informal education and modernization on the evolution of contemporary curriculum.

Philosophical foundations of curriculum

- Values of philosophy in curriculum development as exemplified by

- Perennialism
- Essentialism
- Existentialism
- Pragmatism

Socio-cultural dimensions of curriculum development
- Society and culture distinguished
- Structure of the culture
- Culture and values in the curriculum
- Values cultural induced bias, and the curriculum

Psychological foundations of the curriculum
- Man and the curriculum
- Psychological theories
- Havinghurst's developmental tacks
- Erickson's theory of needs gratification

Political dimensions of contemporary curriculum
- the influence of various political and educational manifestoes on the curriculum development.
- Political realities of curriculum development
- The politics of curriculum decision-making

Stages of Curriculum development
- Aims goals and objectives
- Organization of knowledge within the curriculum
- Criteria and justification for content selection in the curriculum
- Agencies of curriculum development in Nigeria.

Patterns of Curriculum Organization
- Organizational problem (theoretical, conceptual and practical problems)

- the subject centered organization
- the activity of experience organization
- the core organization.

Conceptually and theoretically based Curriculum Designs
- Elements and rationale of a framework for curriculum design
- A methodical approach to curriculum design.

Curriculum evaluation
- Criteria for and nature of curriculum evaluation
- Comprehensive curriculum evaluation
- Formative and summative evaluation
- product evaluation.

EDU 302: Teaching Practice II

The course is offered for about Six weeks during long vacation. Differences between training courses and classroom situations Adaptation of the National Policy on Education to the classroom situations Planning and supervising students' visits to schools for interactions with the teaching staff.

Adoption of such supervision methods as
(i) Image Behaviour Feedback (IBF)
(ii) Clinical Supervision techniques

to encourage student teachers to become competent in teaching and classroom management skills.

Holding conferences with class-teachers and students to assess students' teaching and classroom management skills.

STE 300: Biology Teaching Methods

1. Aims and Objectives of Teaching Biology in the Secondary Schools
   - Essence to school work

- Essence to life

2. Planning for and presenting a Biology lesson
   - Writing a good plan
   - getting materials ready for practical class
   - making instructions as practical as possible.
   - preservation of materials (dead or living
   - Improvising materials that are not available

4. Laboratory practices
   - laboratory settings
   - laboratory safety/dangers
   - laboratory prevention

5. Biology topics in Junior Secondary School Integrated Science syllabus

6 Concepts and Misconception of Biology

7. Assessing Student's Knowledge of Biology

8. Entrepreneurial study: Animal Rearing, Horticulture & Apiculture

STE 302: Chemistry Teaching Methods

1. Aims and objectives of teaching chemistry in the secondary schools

2. Topics in Secondary school chemistry
   - Topics taught in the classroom
   - Topic taught in the laboratory

3. Chemistry topics in the junior secondary school integrated science syllabus.

4. Planning for and presenting a chemistry lesson
   - writing a good lesson plan

- getting materials ready for a lesson
- making lessons as practical as possible
- improvisation in chemistry lesson

5. - Laboratory practices
   - Dos and Don'ts in the Chemistry Laboratory
   - Dangers and safety devices in the laboratory
   - Precautions in the laboratory.

6. Assessing students' knowledge of Chemistry
7. Entrepreneurial study: Medicinal Coconut oil production, Hard and Soft Soap production, Water purification.

STE 304 - Physics Teaching Methods

1 Aims and Objectives of teaching Physics in the Secondary Schools.
- Application of Physics to everyday activities.

2. Topics in the secondary school physics syllabus.
- links between physics and other Science subjects.
- topics taught in the laboratory
- topics taught in the classroom

3. Physics topics in the Junior Secondary School Integrated Science Syllabus.

4. Planning for and presenting a physics lesson
- Writing a good lesson plan
- getting materials ready for a physics lesson.
- Improvisation in physics lesson.

5. Laboratory Practices and Precautions.

6. Current issues and problems in secondary school physics.

7. Assessing students' knowledge of physics

8. Entrepreneurial study: House Electrical Wiring, and Telecommunication Repair Craft

STE306: Mathematics Teaching Methods

Course Contents

1. The Secondary School Mathematics Curriculum
   (a) Objectives of teaching mathematics
   (b) Issues and Problems
2. Psychological Theories and Mathematics Instruction
3. Means of Effective Instruction
   – Motivation and Methods
   – Planning and Materials for Instruction
5. Teaching Techniques – (Use Suggested Topics)
6. Evaluation of Instruction: test Types and Techniques
7. Microteaching: Ideas from journals and/or classroom situation on teaching techniques
8. Microteaching: Selected topics in Secondary School Mathematics Curriculum should be used for the microteaching.
9. Professional Growth of Mathematics Teachers: Professional Organizations Professional journals, in-service courses etc.
10. Entrepreneurial study: Information and Communication Technology (ICT) - Programming and Web Designing

STE 303: Curriculum for the Exceptional Child

Course Contents:

I. Who is Exceptional? Exceptional Child defined.

II. General overview of Special Education
History of Special Education, Current trends in Special Education, Issues of Mainstreaming and labeling.

III. Definitions: Mental Retardation – Moderate. Mild. Severe and Profound, earring Disabilities, Emotional

Disturbance, Speech/Language Disorders, Hearing Impairment, Visual impairment, Physical Handicaps, Giftedness.

IV. Educational considerations for (a) Mentally Retarded Child, Education for the Mildly, Moderately, Severely and Profoundly Retarded. Administrative Arrangements for Managing the retarded child in school.

(b) Learning Disabilities
Process Training, Multisensory approaches, Structure and Stimulus Reduction for Hyperactivity and Distractibility Cognitive Training. Behavior modification with learning Disabled children, Administrative Arrangements. Managing the child in school.

(c) Emotional disturbance:
Conceptual models and Education, Administrative Arrangements, Management the child in School.

(d) Speech and Language Disorders:
Professional Role of the Speech clinician, Teaching Language to Non Verbal Children, Managing the child in School.

(e) Hearing Impairment:
Oralism Versus Mannualism, Auditory Training, Speech reading Sign Language and Finger spelling, Total communication methods or the Rochester method. Behavior modification and with Hearing-impaired children. The use of Hearing Aides, Administrative arrangements and Managing the Hearing impaired in school.

(f) Visual impairment:
Use of Braille, Remaining sight, listening skills, Behavior modification and administrative arrangements for visually impaired the managing the child in school.

(g) Physical Handicaps:
Behavior modification procedures, administrative arrangements, Educational goals and Curricula Prosthetic or theories and adaptive Devices for Daily living, occupational implication, managing physically Handicapped Ehil in school

(h) Giftedness:
Administrative arrangements, Rationale for Differential Educational Model for enrichment, Managing the child in school.

STE 305 – Curriculum Development in Environmental Education.

Course Contents

(a) Philosophical Foundation of Environmental Education
- rationales for Environmental Education in the School curriculum
- The structure and objectives of the Environmental Education Curriculum
- inter and multidisciplinary curriculum structure.

(b) Historical origin of Environmental Education's Curriculum
- formal and informal Environmental Education Curriculum

(c) Religious and ideological framework of Environmental Education Curriculum

- Christian, Islamic and traditional
- Influences on Environmental Education Curriculum Development

(d) Patterns of Curriculum Organization in Environmental Education.
- Interdisciplinary vs. multidisciplinary organization.
- advantages and disadvantages of different patterns of curriculum organizations.
- Curriculum Evaluation in Environmental Education
- Influences on the evaluation of Environmental Education

STE 320: Introduction to Long Essay

1. Introduction
   - Method of resolving educational problems
   - Characteristics of Scientific approach
   - Educational research

2. Literature Review
   - Organising review of literature
   - Library searching procedures
   - Some useful references

3. Research Problems
   - How to state a research problem.
   - Criteria for selecting a research problem

4. Hypotheses
   - Criteria for a good hypothesis
   - Formulation of hypothesis
   - Sources of hypotheses
   - Hypothesis testing

5. Methods of Collecting Information
   - Observation
   - Interviewe

- Questionnaire
- Measurement scales

6. Sampling Procedure
   - Sampling process
   - Types of sampling methods

7. Research Design
   Historical Research
   - Formulation of problem statement
   - Historical hypothesis
   - Sources of data
   - Historical criticism of data
   - Writing historical research report
   - Evaluation of historical research

8. Descriptive Research
   - Methods of presentation
   - Types of descriptive research
   - Evaluation of descriptive research

9. Experimental Research
   - Types of variables
   - Experimental and control groups
   - Internal and external validity
   - Experimental design
   - Evaluation of experimental research

STE 401 - Long Essay

Discussions on the Selected topics to make sure the students understand the implications of their respective topics.

Giving guides on the use of the library materials e.g. text-books, journals and other resources materials.

Giving guides on literature reviews

Supervision and critique of the research project chapter by chapter i.e. introduction, Review of Literature, Methodology etc.

Assessment of the project before the binding to see that the recommended standards are followed.

STE 402: Education and the Human Environment 2 units

1. The nature of education and its relationship with environment
1. The political cultural social and economics contexts of education and environmental degradation.
2. Rate of Change linear and exponential growth.
3. The J-shaped curve of human population growth.
4. Effects of population growth on national development.
5. Education and population control
6. Women education and national development.

7. Historical background of environmental education:
   -Traditional attitudes of Nigerians about the environment
   -Changing attitude of Nigerian about the environment

   Stockholding Conference (its declaration of principles and its recommendations for its action).

   Belgrade charter
   - its guiding principles and its recommendations for the development of new ethics.

   The Tbilisi Conference

9. The nature, forms and causes of environmental pollution
   - Pollution
   - erosion
   - population explosion
   - global warning
   - depletion of ozone layer

- problems emanating from developing in science and technology

10. Essential knowledge about the environmental structure and fictions of an ecosystem energy flow in the ecosystem
Human interrelation in natural processes and its consequences.

11. Methodology of environmental education
    - field work
    - lecture
    - problem, solving
    - augury method

12. Evaluating human impacts on the environment
Evaluation strategies

STE 403: Classroom Testing:

Course Contents
Definition of the Terms: Assessment, Tests, Measurements, Evaluation and Reports in Terms of their purposes in educational system.

- The needs for evaluation in Education
  (i) Placement (ii) Diagnosis
  (iii) Assessment and (iv) Prediction

Types of Tests

- Maximum Performance Tests and Typical Performance Test.
- Criterion – Referenced Tests and Norm-Referenced Tests.
- Objective Tests, Subjective Tests and Projective Tests.
- Selected – Response Tests and Supply – Response Tests.
- Standardised Tests and Informal Tests
- Speed Tests and Power Tests

Planning for the Assessment of Learning
- Overview
- Educational Objectives
- Writing Behavioral Objectives
- Test Planning
- Content Specification

Test Construction
- Overview of Item Writing
- Item Difficulty Index
- Item Discriminating Power.

Test Administration
- Internal Examination
- External Examination

Test Scoring and Reporting
- Scoring of objective items and essay items
- Inter rater and intra ratability
- Deriving Grades for Summative Evaluation

Tests Scores Interpretation
- Simple descriptive methods of treating tests scores
- Arranging in order of magnitude
- Frequency Distribution
- Diagrammatic Representation (Including skewed distribution)
- Conversion of test scores to standard scores.
- Measures of Central Tendencies (Meaning, computation, and interpretation)
- Measures of Variabilities (Meaning, Computation and Interpretation)
- Correlation Measures
- Introduction to test of significance

Continuous Assessment

- What is continuous Assessment
- Why Continuous Assessment
- How can it be carried out in the School Setting?
- Problems of Continuous Assessment in the Nigerian School Setting?

Examiners Report

- Use of examiners report
- External Examiner(s)
- Moderation procedures.