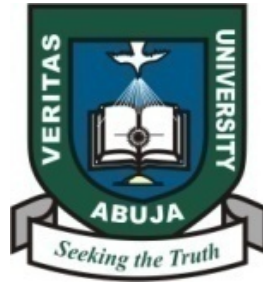


# **VERITAS UNIVERSITY, ABUJA**

(The Catholic University of Nigeria)



*Prospectus*

**of**

**The College of Postgraduate Studies**

October, 2014

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@ College of Postgraduate Studies, Veritas University, Abuja, 2014.

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**ISBN** .....

Veritas University Press Limited  
Zuma II, Bwari Area Council  
Abuja

OR

Liason Office:

Catholic Secretariat of Nigeria, Plot 459 Cadastral zone, Durumi II,

P.O.Box 6523, Garki, Abuja

Tel: 07088839258, 08064237983

Email: [info@veritas.edu.ng](mailto:info@veritas.edu.ng)

Website: <http://www.veritas.edu.ng>

**PROSPECTUS OF THE COLLEGE OF POST-GRADUATE STUDIES**

**BY**

**COLLEGE OF POSTGRADUATE STUDIES**

**VERITAS UNIVERSITY, ABUJA**

(The Catholic University of Nigeria)

October, 2014

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## **WELCOME TO OUR POSTGRADUATE PROGRAMMES AND STUDENTS**

Veritas University (The Catholic University of Nigeria) has come of age in commencing a small but critical list of postgraduate programmes that are central to the development of academic work in the entire University. Post graduate programmes in a University are not just for the purpose of graduating a set of students' with high sounding titles and esoteric canticles of words. They are indeed necessary for the research content and development of the under graduate programmes that are routed in the development of the nation. They are also the very basis of establishing Universities in the first place. The idea of a University is grounded in producing students taught by lecturers who can transmit knowledge based on interaction with insights and initiatives that enrich teaching of undergraduate.

We have in this University reached a point of no return in the transformation of lecture modules and we shall do everything to ensure our immediate constituency, the church, students at large and the nation benefit immensely. We are further throwing open our doors to the nation at large and we are ensuring a new vista of opportunities to the young people of this country for the fulfillment we all long for in their lives especially through the formation process. Welcome to a new era of research in Veritas University and the nation.

**Prof. Michael Kwanashie**

**Vice Chancellor**

## **Foreword**

Veritas University is out for a revolution in research and post graduate studies in this country as it introduces into the Nigerian academic community a new set of post graduate programmes. These programmes have been well researched in its likely effect on the life of Nigerians who are the ultimate beneficiaries. A Critical list of post graduate programmes is being put on the academic horizon that would revolutionize the lives of Nigerians with a view to transforming the administrative and developmental processes. These cut across applied science and technological issues to social sciences and humanities, bringing about new ways of doing things and understanding issues. More than that, for the first time in this country, post graduate students are brought face to face with the understanding of human formation process that works on the development of character in a way that the administrative and political process, emphasizing ethical behavior, accountability, transparency and rule of law are enhanced. These issues used to be the concern of churches, these issues have found their way into our post graduate programmes knowing very well that this is the set of people who holds the key to our administrative processes.

For now we are starting with post graduate diploma and masters degree programmes because we want to consolidate from a bottom-up process that will eventually include the PhD programme. In this way we can plug the loop-holes and ensure an efficient menu.

We hereby ask students and staff to ensure they benefit from these programmes and transform them where necessary. The college looks forward to an inter-racial, international and inter-religious group of students with blunted consciousness in ethnicity and bigotry. There will also be men and women of strong commitment to idealism, thoroughness and doggedness in work ethics. The College will capture into its fold, people who are committed to raising the image of the black race with the determination to be and beat the best in the world.

This post graduate programme will be different from previous ones in this country to the extent that its staff and students will characteristically aim at excellence produced by brilliant people carefully selected from across the world without bias except for the ability to put Nigeria and Africa beyond the reach of sycophants. .

**Prof. C.S Ige**

**Dean, College of Post-graduate Studies**

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## **PART ONE**

### **1.0. Introduction**

The College of Post-graduate Studies of Veritas University, Abuja was conceived as a centre of research excellence for training in research and the extraction of truth which is incontrovertible in all its ramifications given contemporary assault on its elements. The College was established as a response to the demands of the second phase development strategy of the University. Consequently, the establishment of the College of Post-graduate Studies (CPS) was approved by the University Senate through a resolution passed at the 32nd Meeting of Senate of Veritas University, Abuja held on January 31, 2013. The principles for establishing the College are in tandem with the statutes that established Veritas University as conceptualized by its founding fathers. A key point in their idea of a university and the training of young people is a formation process which holistically ensures that graduates of Veritas University are brought up to live the Christian life through integrity, humility, hard work, discipline creativeness as enshrined in the practice of the Catholic faith. The College of Post graduate Studies was conceived to promote these core values in the engagement of teaching, research and community service.

### **1.1 College of Postgraduate Studies**

The name of the College shall be College of Post-graduate Studies (CPS) as approved by the Senate of Veritas University, Abuja. The College shall run Post-graduate Diploma (PGD), Master of Arts (M.A) and Master of Science (M.Sc.) degree programmes for now.

### **1.2 Philosophy**

- (a) Widening the space for creativity, personal initiative and entrepreneurship built on personal integrity and Christian ethos;
- (b) Draw attention to unrecognized problems and widen the scope for sustainable human development;
- (c) Create an enabling environment for diversification of human understanding of local and international co-existence with respect for human dignity;
- (d) Make clear and definite contribution to knowledge that is capable of impacting life and society;



- (e) Reach for superior technologies that protect the prolongation of human existence and takes care of genuine fears of humanity and;
- (f) Enhancement of truth as the forerunner to credibility in research.

### **1.3 Vision**

The vision of the College is to see Veritas University become a major centre of research in the next decade and in particular a specialized training centre providing solutions to key human development challenges in the context of holistic human formation process accessible to all.

### **1.4 Mission**

Through research and training, the mission of the College is to develop research skills that focus on sustainable human development in the humanities, social sciences and natural and applied sciences where national and international bottle necks obstruct human and technological progress.

### **1.5 Objectives**

The College seeks to pursue the following objectives:

- (a) Bring out the truth in the light of evident and prevailing circumstances;
- (b) Observe and research into renewal programmes and technologies to find solutions to limiting factors the process human development in order to preserve human existence;
- (c) Research work in the University will not only be sensitive to current problems of the society but draw its focus from global threads and trends given Nigeria's international relevance;
- (d) The University's global context therefore, means that international linkages will play a significant role as the students will be encouraged to aim at pushing further the frontiers of knowledge and;
- (e) Research and post-graduate work in the University will address, mindful of project effort into local and international collaboration, the obstacles to development in Africa particularly, Nigeria.

## **1.2 Structure of the College of Post-graduate Studies**

### **1.2.1 Administrative Structure**

The University is divided into a number of Colleges with each college enjoying some measure of autonomy which allows each College including the College of Post-graduate Studies to manage its affairs without any interference from the University administration. The College is responsible for the administration of its day to day activities and reports to the Vice Chancellor as the academic and administrative head of the University. Typically, the College of Post-graduate Studies runs an annual budget and imprest provision which allows the College to make some defined and qualified purchases defined and within the ambits of Deans and HoDs of the College. The principal purchases within the budget are subject to approval by the University.

Thus the College is runned in a collegiate framework as approved by the National University Commission [NUC] and on the advice of the Vice Chancellor. Typically, a Dean is the Head and is responsible to the Vice Chancellor in the day to day administration of the College. He looks forward to him for directives that are usually necessary when there is a need for a major decision. Such decisions come into light through the consideration of the Board of Post-graduate Studies. The PG Board is made up of senior members of the academia and chaired by the Dean on behalf of the Vice Chancellor to whom he owes monthly reports of the day to day administration of the college. The Board in its minutes makes decision about the College and these decisions are supposed to be carried out by the Dean by its supporting and administrative staff.

Within this structure is the secretary of the Board of the College of Post-graduate Studies, he or she runs the administrative structure of the College and reports to the Dean. He has under him or her administrative staff cadre including the filing secretary and clerical assistant that reports to the latter. Also in this section is library staff who manages the library of the College but reports to the librarian through the secretary of the Board.

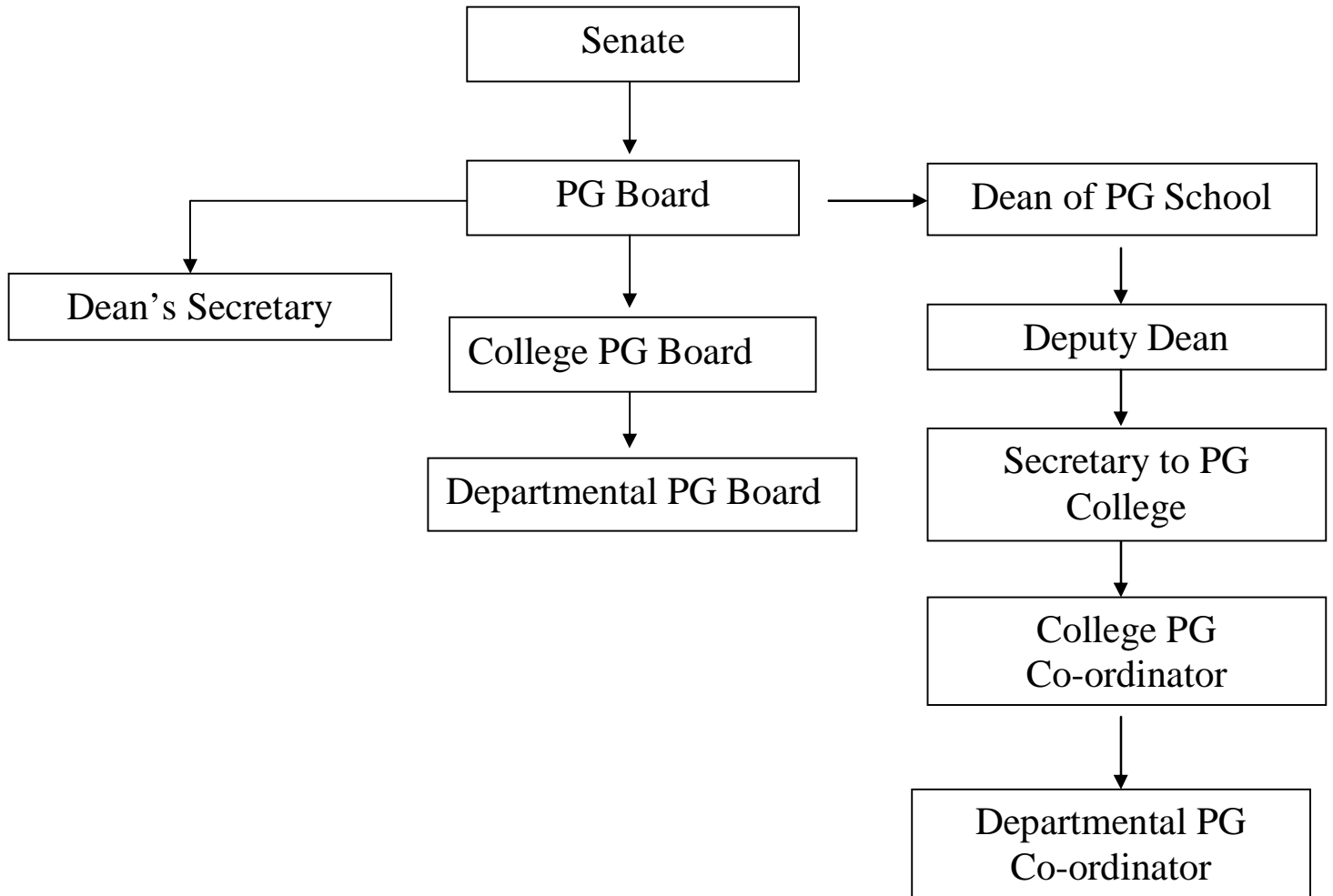
The staff is responsible to the secretary of the Board as indeed other staff in the secretarial poll. There is a Deputy Dean who reports to the Dean and manages the machinery of the College where the Dean is not on seat. Within this set up there is a secretary and clerical assistant working and reporting to the Deputy Dean to close up the administrative process.

### 1.2.2 Membership of the College Board

The Post-graduate Board consists of:

- i. Chairman of the Board (Vice Chancellor's Representative)
- ii. Dean of the College of Post-graduate Studies
- iii. Deans of the Colleges
- iv. Heads of Departments (HoDs)
- v. Dean of Student Affairs
- vi. Secretary to the Board

**Figure 1:** Organogram of the Administrative Structure of the College of Post-graduate Studies



### **1.2.3 General Rules and Regulations**

The Rules and Regulations guiding the College of Post-graduate Studies of Veritas University are anchored on “Benchmark minimum academic Standards for Post-graduate Programmes in Nigerian Universities,” particularly those concerning the programmes for which the University sought the approval of the National Universities Commission (NUC).

The Rules and Regulations as dealt with here cover only the academic aspect of the programmes and not the physical quantities that precede the establishment of the College. These have been addressed by other documents setting up the College. This document will therefore, only refer to physical quantities and requirements when necessary.

Besides, matters relating to individual programmes within departments, e.g. the nature and curriculum for each programme are dealt with in Part Two of this Handbook and cross-references can be made to them.

The academic work in Veritas University is not separable from the strength of the formation process embedded in the training of the student including ethical standards and University core values in the character molding process for which Veritas University is generally known. These are also dealt with in the students’ handbook.

A complete appraisal of the Rules, Regulations and programmes are only ascertained when the PG students make references to this at a later time before and after admission. The aspects of the Rules and Regulations covered here include, Admission requirement, teaching requirement and requirements for the Award of Degrees. Other relevant issues to these are also covered.

### **1.2.4 ADMISSION REQUIREMENTS**

- a) Candidates must possess at least 5 credits at O’Level in the composition of subjects required by each department.
- b) The requirement for admission into the Masters Degree programme is a first degree with a minimum of Second Class Lower Division and 3.00 CGPA from a recognized University.
- c) A candidate may be required to go through our diploma programme which may serve as a ‘bridge’ programme especially, for people who did not graduate in that programme of BA/B.Sc.

- d) Admission into our post-graduate diploma will require a minimum of third class and above in BA/B.Sc.
- e) All application must be accompanied by academic transcripts and referee's reports.
- f) The College of Post-graduate Studies of Veritas University may take registered students of higher degrees from other Universities on transfer if they meet the University's conditions for entry to such programmes.

#### **BASIC REQUIREMENTS FOR TEACHING POST-GRADUATE PROGRAMMES**

- (a) The minimum qualification for teaching Masters Degree programmes in the College of Post-graduate Studies is a PhD and preference will be given to people of Lecturer 1 and above.
- (b) For Post-graduate diploma programmes, the minimum qualification for teaching will be a Masters Degree and a minimum level of Lecturer II.
- (c) An Expert in a field given a Post-Graduate assignment of Veritas University could be an Adjunct Lecturer, a Visiting Staff, a Staff on Sabbatical or a permanent Staff. However, preference will be given to a staff on ground who holds a permanent appointment for easy location.

#### **1.2.5 REQUIREMENTS FOR AWARD OF DEGREE**

- (a) Taught courses will be externally moderated. The setting of questions will involve the vetting by external Examiners, and when graded by the internal examiners, the scripts will be forwarded to the external examiners for verification of the marks and grades and the scripts returned to the departments.
- (b) All results must be approved by the College Board and Senate.
- (c) 'Externally examined' should mean to vet, check the marking scheme and questions before and after written examination and report to the Vice- Chancellor.
- (d) Candidate should have a minimum of 3.0 CGPA.

- (e) Supervision will be conducted by a team of supervisors for the Masters degree and above.  
This is necessary to ensure that all areas of a subject (topic) are effectively considered especially where the students have to deal with an inter-disciplinary subject.
- (f) Candidate whose research work is considered to be unsatisfactory by his Department will be asked to withdraw on a resolution of the College Board and Senate respectively.
- (g) Copies of all Dissertations will reach the Post-graduate College at least two months before the Convocation in which the candidate wants to be presented for the award of the degree.
- (h) A minimum of six copies of the final work of the temporarily bound Dissertation will be submitted to the department. After the Dissertation defence, the candidate will make all necessary corrections and submit four copies of the properly bound Dissertation with certification by the Board of Examiners to the Post-graduate College.
- (i) For each Post-graduate student, there will be a Board of Examiners for Dissertation defence comprising at least five members, which must include members of the project Supervisory Committee, the External Examiner, who will be the Chairman and must be someone of at least Senior Lecturer grade, and a representative of the Post-graduate College who must be an academic with relevant background.
- (j) There will be an oral defence of Dissertation, and each student must satisfy the Examiners in this regard in order to qualify for graduation.
- (k) For a student to be in good academic standing, he/she must obtain a minimum cumulative grade point average of 3.0 at the end of each Session. This will be so whether it is masters degree or PGD programme.
- (l) A student who absents him/herself for two consecutive semesters without a valid reason may be asked to withdraw from the University, irrespective of his cumulative grade point average.
- (m) A student, for good reason and with the approval of Senate and upon recommendation by the Dean, may suspend his programme of study for a

maximum of one calendar year.

- (n) A student who transfers from one programme to another or from another University may be credited with those course credit units earned which are relevant to the curriculum of the new programme.

## **DURATION**

### **(a) Masters Degree Programme**

The duration for masters degree programme will be a minimum of three (3) semesters and maximum of five (5) semesters for full time and a minimum of five (5) semesters and maximum of seven (7) for part-time.

### **(a) PGD Programme**

The duration for full-time PGD programmes will be a minimum of two (2) semesters and maximum of four (4) semesters. For part-time, duration will be a minimum of four (4) semesters and maximum of six (6) semesters.

## **WRITING OF DISSERTATION/PROJECT**

- (a) Dissertation is the recommended name for the Masters project, while Project is the recommended name for the Diploma project.
- (b) APA is the recommended and acceptable style and structure in all Colleges in the CPGS. However, Colleges may request the Board for permission to adopt their own style and structure.
- (c) All students will submit their project only in partial fulfillment of the requirements for graduation in the various degrees for which they have registered.
- (d) In all cases, the first two (2) semesters is dedicated to course work and the third (3) semesters is for research. Even though the project and research process may start the very first day of the commencement of the programme.
- (e) For the PGD courses, the two (2) semesters should be for course work although, sufficient allowance will be made to complete the project.

## WRITING EXAMINATIONS

- (a) There will be a written examination in each taught course at the end of every Semester. To qualify for the examination, the student must have attended at least 75% of the lectures in that course.
- (b) The scores for each course will be made up of 30% continuous assessment and 70% examination. To pass a course, a student must score at least 50% in both the continuous assessment and the examination.
- (c) There will also be a continuous assessment (CA) which will comprise three components namely; (test/seminar/assignment).
- (d) All departments must give research work a course code and it must be noted that PGD students will write project while Masters degree students must write a dissertation.
- (e) After first appearance, any student who fails to successfully defend his/her work will be given a second chance after which such candidate will be asked to withdraw.
- (f) The grading system will be as follows:

Table 1. Grading System (Post-graduate Programmes)

% scores	Grade	Grade Point
70 -100	A	5
60-69	B	4
50 -59	C	3



Below 50	F	0
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(g) For each Post graduate student, there shall be a Supervisory Committee comprising at least a Senior Lecturer and two associates, other Supervisors, one of who must be from outside the candidate's Department, unless if it is in PGD where someone at level of lecturer II whether he has PhD or not. This Committee will constitute the Dissertation/Project Supervisory Committee and it will have the responsibility of guiding and supervising the student as well as approving all aspects of the project and the thesis before submission to the External Examiner.

(h) The first supervisor will be known as the Chief supervisor while the rest will take care of the inter-disciplinary nature of the subject.

(i) The Board of Post-graduate Studies will on the recommendation of the HoD approve the Supervisory team and PGD topics.

(j) After a candidate's admission has elapsed, he/she can only be allowed to continue, subject to the decision of the PG Board who will determine the suitability and ability to continue and recommend to Senate.

(k) A Candidate who does not complete his programme within the specified maximum period will be withdrawn from the programme unless he has sought and obtained extension before the expiration of the maximum time.

- (l) Each student will be required to register a minimum of 24 credit units of course-work per semester and 12 credit units of research (including Dissertation) for the Masters Degree programme.
- (m) In exceptional circumstances, Senate may grant an extension of time to a candidate on the recommendation of the College Board. Such extension will not exceed two (2) semesters in both masters and PGD programmes respectively.

### **EXAM MALPRACTICE AND PLAGIARISM**

#### **(a) Examination misconduct**

The College Board has Zero tolerance for all forms of examination misconduct including plagiarism in whatever form and manner.

#### **(b) Sanction**

Any student found guilty of examination misconduct will be sanctioned by expulsion or cancellation of the paper depending on the gravity of the offence.

## **PART TWO**

### **2.0 POSTGRADUATE PROGRAMMES**

#### **2.1 COLLEGE OF HUMANITIES**

##### 2.1.1. Department of English and Literary Studies

##### **Programme: Master of Arts (M.A.) English and Literary Studies**

##### **Name of Degree:**

Master of Arts (English Language)

Master of Arts (Literature)

##### **Philosophy of the M.A. Programme**

The philosophy of the M.A. programme is to train and develop scholars whose critical inquiries into the use of English language as a medium of communication in L<sub>2</sub> situations in both regular communication and creative writing would reassert human values, and appreciate the complexity of human motivation and actions. This is against the background of societies (such as those in Africa) where anarchy and chaos threaten the existence of society, and where, as a panacea, writers respond to these in various writings that become the subject of serious study beyond the undergraduate content. The products of these programme are therefore expected to acquire linguistic and critical analytic competences that would enable them exhibit a higher proficiency in the use of the English language on a variety of discourse situations, as well as interpret literary works in the English Language.

##### **Objectives of the Programme**

By exposing students to advanced knowledge in the English Language and Literature disciplines, the programme aims at:

- (i) producing scholars who would utilize their knowledge of English Language and Literature-in-English, for human, national, African and global development;

- (ii) producing graduates who apply their knowledge for the advancement of humanity;
- (iii) highlighting awareness especially through equipping and motivating them for a full and balanced development of their personality and the need for replication and the refinement of same;
- (iv) equipping them to communicate excellently in the English language, and show creativity in the use of English in discourse situations and/or in creative and critical writing.

### List of Academic Staff

Name of Academic Staff	Area of Specialization	Discipline	Qualification	Rank
Chimalum Nwankwo	Literary Theory	Literary Studies	PhD (1982); M.A. (1980); M.F.A. (1979)	Professor
Gabriel B. Egbe	Applied English Linguistics	English Language	PhD English; M.A. English; B.A. (ED) English	Associate Professor
Apegba Ker	Oral And African Literature	Literary Studies	PhD (1999); M.A.(1990); B.A.(1983)	Associate Professor
George T. Teke	Transformational-Generative Grammar/Minimalism	Linguistics	PhD (1987); M.Sc. (1978); B.Sc. (1977)	Senior Lecturer
James Onyebuchi Ile	Literature-in-English and American Studies	Literary Studies	PhD (2008); M.A. (2003); B.A. (1998); B.A. (1991)	Senior Lecturer
Angela Ngozi Dick	African Literature and Gender Studies	Literature	PhD African Literature; M.A. Literature; B.A (Ed) English	Lecturer 11
Chukwuka O.	Poetry	Literary	PhD; M.A.; B.A.	Lecturer 11

Nwachukwu		Studies		
John Nkpot Tanyi	Syntax	English Language	PhD English; M.A. English; B.A. (Ed) English	Lecturer 11
Kalu Obase Kalu	African Literature	Literature	M.A. Literature; B.A. (Ed) English	Assistant Lecturer
Christiana K. Bitrus	Language Education	Language Education	B.A. (Ed), M. Ed.	Assistant Lecturer
Abiodun Daniyan	Language Education	Language Education	B.A. (Ed), M. Ed.	Assistant Lecturer

### **Admission Requirement**

#### **M.A. Programme**

- (i) All candidates must possess the minimum of five O' Level Credit Passes which must include English Language and Literature in English.
  
- (ii) Candidates must possess a good Bachelors degree in English and Literary Studies or English Language or English Literature, or B.A. Education/English or Linguistics not lower than a Second Class Lower Division, from Veritas University, Abuja or any other recognized university.
  
- (iii) All candidates shall be subjected to a selection process.

### **Graduation Requirement**

To be awarded the M.A. degree in English Language or Literary Studies, a candidate must have taken and passed the prescribed number of compulsory and required courses selected from the approved list, and totaling 30 Units as follows:

Core Courses	24 Units
Thesis	6 Units
<b>Total</b>	<b>30 Units</b>

In all cases, M.A. students must write and submit to the Department, a thesis/dissertation duly supervised by a lecturer in the Department whose qualifications are not below the Ph.D. Such a thesis must be defended before an external examiner nominated by the Department and appointed by Senate for that purpose.

- i. Minimum number of Earned Credit Hours for graduation: **30 Credit Hours**
- ii) Minimum No. of years for graduation: **One Year**
- iii) Minimum residency requirement: **One Year**

Minimum CGPA for graduation: **3.00**

## **DETAILED COURSE STRUCTURE OF M.A. PROGRAMME IN ENGLISH AND LITERARY STUDIES (ENGLISH LANGUAGE OPTION)**

### **M.A. ENGLISH LANGUAGE**

#### **First Semester**

##### **Core Courses**

ELS 5011: Advanced Research Methods	-	3 units
ELS 5021 Advanced English Phonetics and Phonology	-	3 units
ELS 5031: Advanced English Syntax and Morphology	-	3 units
ELS 5041: Advanced Semantics and Pragmatics	-	3 units
Total Core		12 Units

#### **First Semester**

##### **Electives: Choose one**

ELS 5051: Bilingualism and Multilingualism	-	3 units
ELS 5061: Varieties of English	-	3 units
ELS 5071: Translation	-	3 units

#### **Second Semester**

##### **Core Courses**



ELS 5141: Modern European Literature	-	3 units
ELS 5151: Popular Literature and the Mass Media	-	3 units
ELS 5161: Advanced Creative Writing	-	3 units
ELS 5171: Gender Studies	-	3 units

## **Second Semester**

### **Core Courses**

ELS 5112: Studies in African Poetry	-	3 units
ELS 5122: Studies in African Drama	-	3 units
ELS 5132: Advanced Studies in Oral Literature	-	3 units
ELS 5012: Advanced Stylistics	-	3 units

Total Core - 12 Units

## **Second Semester**

### **(Electives: Choose One)**

ELS 5142: Issues Comparative Literature	-	3 units
ELS 5152: American Literature	-	3 units
ELS 5162: Commonwealth Literature	-	3 units
ELS 5172: Modern British Literature	-	3 units
Total		12 Units

ELS 5082: M.A. Thesis	-	6 units
Total Core	-	24 units
<b>Total Required</b>		<b>30 Units</b>

## **COURSE DESCRIPTION: M.A. COURSES IN ENGLISH LANGUAGE OPTION**

### **ELS 5011: Advanced Research Methods 3C**

This course critically presents diversities of research methods and approaches. It will also expose students to the problems of research. Issues of emphasis include: editing, authenticity,



plagiarism, interpretation, original research and documentation. It equips students and prepares them for thesis writing.

**ELS 5021: Advanced English Phonetics and Phonology 3C**

This is an advanced study in the phonetics and phonology of English. Special attention should be paid to the history of phonological concepts, including the development of the phoneme and feature theories for segments and suprasegmentals. The sound systems of British and American English should be studied along with the description and analysis of sound segments, stress and intonation in English. Some current theories in phonetics and phonology should also be employed in phonetics and phonological descriptions.

**ELS 5031: Advanced English Syntax and the Morphology 3C**

This consists of detailed studies of new trend and various aspects of the grammar of English. The different models of grammar, with emphasis on the nature of the semantic component and transformations should be examined. Morphophonemic and an advanced study of the word form, lexeme and the morphological processes of English should also receive emphasis.

**ELS 5041: Advanced Semantics and Pragmatics 3C**

The aim of this course is to expose the graduate student to the problems of meaning of English from the linguistic, philosophical, and cognitive perspectives. It entails a study of semantic theories, approaches, and various aspects of meaning in language, including such notions as sense and reference, semantic fields, componential analysis, lexical meaning relations, ambiguity and vagueness, presupposition, entailment, propositional calculus, truth values and truth conditions, speech acts, Pragmatics (principles and mechanics, knowledge of the world and shared knowledge) etc.

**ELS 5051: Bilingualism and Multilingualism 3C**

Concepts and theories of bilingualism/multilingualism; measurement of bilingualism; acquisition, learning and use of bilingualism; challenges, opportunities and constraints of bilingualism/multilingualism; bilingualism and national development; language policy and planning in a bilingual/multilingual state; effect of globalization, modernization and hybridization on language use in a bilingual/multilingual community.

**ELS 5012: Advanced Stylistics 3C**

This course studies the various theories of style, particularly literary stylistics and linguistic stylistics and the application of these theories for the analysis of English text types, particularly

literary/non-literary. Topics to be covered include: the problems of style; norm and deviation; foregrounding; linguistic theories and stylistics; stylistics in the study of African literature in English; and stylistics and language teaching. This course is for both language and literature graduate students.

**ELS 5022: Advanced Discourse Analysis                    3C**

The course examines at a deeper level the way-structuralist theories inform the analysis of natural language texts in English, spoken and written. The course also identifies the systems and patterns within discourse and to relate these features to the contexts in which texts are produced. Topics to be covered include: formal aspects of discourse; functional aspect of discourse; discourse connections; discourse types; discourse styles; conversational analysis; and the presentation, derivation, production, and understanding of discourse.

**ELS 5052: Advanced Sociolinguistics                    3C**

This course examines at a deeper level the relationship between language and society, and explores language diversity within and across speech communities. It focuses on differences in speech and various social contexts, the social functions of language and how language conveys social meaning. Topics to be covered include: methods of sociolinguistic data; language variation; language change; style-shifting; attitudes toward language; multilingual societies; language planning; and language and gender.

**ELS 5072: English in West African                    3C**

English in West Africa is an investigation of the varieties of English in the West African region. It aims at getting graduate students to understand thoroughly the major issues involved in the nativisation of new Englishes and to stimulate interest in the description and appreciation of features of English in the West African territory. Topics include: problems of defining Nigerian English; history, status and features of English in Nigeria; Cameroun, Liberia Gambia and Ghanaian Englishes. It also includes the emergence and status of Pidgins and Creoles in the West Africa.

**ELS 5042: English in West Africa 3C**

English in West Africa is an investigation of the varieties of English in the West African region. It aims at getting graduate students to understand thoroughly the major issues involved in the nativisation of new Englishes and to stimulate interest in the description and appreciation of features of English in the West African territory. Topics include: problems of defining Nigerian English; history, status and features of English in Nigeria; Cameroun, Liberia Gambia and Ghanaian Englishes. It also includes the emergence and status of Pidgins and Creoles in the West Africa.

**ELS 5082: M. A. Dissertation 6C**

The M. A. Thesis is designed to give graduate students an opportunity for a reasonably independent research, with the supervisor providing only essential guidance. It seeks to encourage the students to utilize the knowledge acquired in their training in ELS 5011: Advanced Research Methods, and to present their thesis in a format which follows in every detail, the guidelines approved by the Department of English and Literary Studies as well as the guidelines of the School of Postgraduate Studies. This is applicable to both the language and the literature graduate students.

**COURSE DESCRIPTION: M.A. COURSES IN LITERATURE OPTION**

**ELS 5162: Commonwealth Literature 3C**

This course focuses on the literature produced in British former colonies. It is a genre of literature that examines how these countries grapple with the issues of colonialism, independence, post-colonialism/imperialist politico-economic control of these countries, and the concomitant crises of underdevelopment. Representative texts dealing with such themes as mentioned above should be selected for critical evaluation and explication using literary theoretical models such as post-colonialism, post-modernism, magic realism, feminism, gender, among others.

**ELS 5172: Modern British Literature 3C**

This course focuses on Modern British Literature with a selection of authors from the 20th - 21st centuries. It emphasises critical study and analysis of selected fiction, poetry, drama, and essays

dealing with contemporary themes and trends relating to the British culture, socio-political, and economic experiences in this era of globalisation.

**ELS 5151: Popular Literature and the Mass Media      3C**

This course focuses on the genre of literature dealing with ordinary human experiences, expressed in non-technically structured form unlike serious literature, which is technically structured. Example of this genre includes “The Onitsha Market literature” and other love stories dealing with individual relationships, etc. This type of literature is used for dissemination of information within the domestic sphere and sometimes replaces the radio and television. There will be a selection of texts for critical reading and analysis of themes, language, and style of this literary strain.

**ELS 5111: Studies in African Fiction      3C**

An intensive study of African prose fiction in its various forms. The thrust of this course is the historical, sociological and contextual aspects of the genres of fiction. It is desirable that students transcend an analysis of aspects of fiction such as setting, thematic preoccupation and form. The course will prepare students for locating fiction in diverse milieu and antique of extra-literary determinants; including austerist ideology, social crucible and theoretical issues that provide for a comprehensive and advanced in-depth critical dispensation. This critical dispensation including less known texts will enhance students’ literary perception. There will be an emphasis on modern and contemporary trends and peculiarities in the growth of fiction. The contributions of authors whose works constitute landmarks in the growth of fiction is essential. Such authors include Henry James, Joseph Conrad, James Joyce, D.H. Lawrence and Virginia Woolf. Others are Graham Greene, William Golding and Angus William.

**ELS 5121: Advanced Literary Theory and Criticism      3C**

The development of literary criticism and theory informs every aspect of literary studies especially at the postgraduate levels. This course will look at aspects of biography, chronology, sources, influences and bibliography in relation to literature, and on specific theoretical approaches to the study of literature. The intersections of literature and other disciplines that account for the diversities of critical studies and theories should also be examined. There will be

an underscoring of the modern and contemporary periods as the melting pot of theories. The interaction of literature with philosophy, psychology, sociology, ideology, and the way literary theories are enriched by inter-disciplinary thrust will be well grounded. Authors and texts will be studied from generic, periodical, regional and other dimensions and perspectives. Theories such as Formalism Structuralism and Reader Response theory will be critiqued. More modern and contemporary criticism and theories that will be studied include Semiotics, Deconstruction, Post Modernism, Gender theories, Inter-textuality, Psycho-analysis, Postructuralism, etc. Authors that occupy the front-burners of literary aesthetics will include; T.S. Eliot, Sigmund Freud, Trevor Tsondzo, Roland Barthes, Northrop Frye, Chinua Achebe, Wole Soyinka, Ama Ata Aidoo and others.

**ELS 5171: Gender Studies                    3C**

This course will focus on the varieties of approaches to literary criticism that attempts to examine the ways in which literature will emphasize the influence of gender on literary works in all the major genres of literature. Emphasis will be placed on the construction or deconstruction of the female world-view, themes, use of language, etc in the interpretation of selected texts.

**ELS 5132: Advanced Studies in Oral Literature                    3C**

A study of orality in literature and of selected genres in African and other related traditions. This course will establish the historical and social contexts of oral literature. It is designed to present major patterns in oral literature with a special focus on African oral literature and performance. Issues and trends that will be highlighted include oral literary theories and oral narrative performance. The nature, form, transmission and delivery of African narratives will form a significant aspect of this course. The development of folklore with examples from authors like M. Parry will be underscored. The relationship between oral and written literature and the function of oral literature in African Societies and methodology will be central.

**ELS 5112: Studies in African Poetry                    3C**

A critical study of African poetry from a detailed thematic and stylistic perspective will be the core of this course. Attention will be paid to African aesthetics in poetry. Selected poets will be studied intensively. These include Okot P. Bitek, Wole Soyinka, Christopher Okigbo, Kofi

Awonoor, Jared Angira, Lenrie Peters, Leopold Senghor and more recent African poets such as Kofi Ayindoho, Niyi Osundare, Sipho Semphala, Funsho Aiyejina, Tanure Ojaide, etc.

**ELS 5122: Studies in African Drama      3C**

A study of the major works, playwrights, and theatre tradition in contemporary written African literature. The course will be an in-depth critique of the way playwrights appreciate and respond to the major historical, social, political, philosophical and moral issues in Africa. Emphasis will be placed on content and dramatic style. The major purpose is to sharpen the insight and intelligence with which we read the probing dramatic artifacts of the time. Authors to be studied include Wole Soyinka, Ngugiwa Thiongo, Athol Fugard, Sarif Easman, Femi Osofisan, Bode Sowande, Kole Omotosho, Ola Rotimi, Efua Sutherland, Ama Ata Aidoo, Zulu Sofola, Tess Onwueme, etc.

**ELS 5142: Issues in Comparative Literature      3C**

The concept and scope of comparative literature, dimensions of comparativism and separativism in literary studies, as well as factors that must be of central focus in bringing together authors and texts for comparison. It is important that the response of writers to ideas, socio-political developments, and the literary tastes that go into the shaping of literature be highlighted in the course of teaching.

## **2.1.2 DEPARTMENT OF HISTORY AND INTERNATIONAL RELATIONS**

Master of Arts in History (M. A. History) with specialization in:

1. Diplomatic and International History
2. Economic History
3. Historiography
4. Social History
5. International Economic Relations
6. Nigerian and African History
7. Culture History
8. Church History

### **Philosophy**

The Programme is designed to produce future high quality researchers, teachers and senior level managerial staff for both public and private sectors of the economy and academia. It is a response to the need of Nigeria for skilled manpower in diverse areas of public life including public administration, foreign affairs, international and local politics, governance at all levels with specialized skills.

### **Objectives**

The objectives of the programme are:

1. To produce graduates with advanced skills and competence in diverse areas of History.
2. To produce high level graduates with the ability and capability to meet the need for skilled manpower in the society.
3. To train and prepare intending candidates for higher degrees (PhD) for high level research in the fields of History.
4. To train graduates to develop the ability for critical thinking and sound objective judgment through a broad knowledge of theoretical and practical issues reminiscent of history and current trends in international politics.





### List of Academic Staff

Name of Academic Staff	Area of Specialization	Discipline	Qualification	Rank
Okpeh O. Okpeh Jnr.	African History, Gender and Development Studies	History	PhD	Professor
		International Relations	PhD	Associate Professor
		Political and Social History	PhD	Associate Professor
Zara E. Kwaghe	Historiography	History and International Relations	PhD	Senior Lecturer
Phillip Akpen	Economic History	History	PhD	Senior Lecturer
Musa Hambolu	International Relations	History	PhD	Senior Lecturer
Chinyere S. Ecoma	Diplomatic History	History	PhD	Lecturer 1
Toochukwu Okeke	Social History	History	PhD	Lecturer II
Apya, N. Hyacinth	Social History	History	PhD	Lecturer II
Tor Ayemga		History	PhD	Lecturer II
Fidelis Enang	Cultural History		M.A.	Assistant Lecturer

Egbe		History	M.A.	Assistant Lecturer
Mary-Aderonke Afolabi-Adeolu	Social History	History	M.A.	Assistant Lecturer
Moses T. Korinya		History	M.A.	Assistant Lecturer

### **Admission Requirements**

- i) Candidate must have met the necessary ‘O’ Level admission requirement of five credits including English language.
- ii) Candidates must have a first degree in History, Political Science, International Relations or its equivalent from an institution recognized by the Senate of Veritas University. Such programme(s) must be accredited by the NUC
- iii) Minimum of Second Class Lower degree with a minimum CGPA of 3.00 on a five point scale.

### **Graduation Requirements**

- i. Minimum number of Earned Credit Hours for graduation: Thirty Six (36)
- ii. Minimum duration for graduation: **(3 Semesters)**
- iii. Minimum CGPA for graduation: **2.50**

## **DETAILED COURSE STRUCTURE AND PROGRAMME CURRICULLUM OF M.A. PROGRAMME IN HISTORY**

### **First Semester**

#### Compulsory Courses

Each M. A. candidate in History is expected to do the following first semester compulsory courses.

1. HIR 7611: Theory and Methods of History (3 Credit Units)

2. HIR 7621: Thematic Studies in Nigerian History (3 Credit Units)
3. HIR 7631: Colonialism, Nationalism and Independence in Africa (3 Credit Units)
4. HIR 7641: The Military and Politics in Africa (3 Credit Units)

Electives (Choose any Two)

**(A) Economic History**

1. HIR 7651: Economic History and Developments in Africa from the 20th century to the present. (3 Credit Units)
2. HIR 7661: Economic History of Nigeria since the 20<sup>th</sup> century to the present. (3 Credit Units)
3. HIR 7671: Problems and Prospects of Regional Economic Developments in West Africa.  
(3 Credit Units)
4. HIR 7681: Africa and European Imperialism (with particular emphasis on its economic implications (3 Credit Units)
5. HIR 7691: Land and Labour Issues in Africa (3 Credit Units)

**(B) International Relations**

1. HIR 7701: Theories of International Relations (3 Credit Units)
2. HIR7711: International Institutions and Organizations (3 Credit Units)
3. HIR 7721: The Evolution of Nigerian Foreign Policy (3 Credit Units)
4. HIR 7731: Studies on Strategic Issues: From the 20th century to Present (3 Credit Units)
5. HIR 7741: Diplomatic Process and Practice (3 Credit Units)
6. HIR 7751: Regionalism and New World Order (3 Credit Units)
7. HIR7761: Environmental History from the Industrial Revolution to the United Nations Convention on Climate Change (3Credit Units)
8. HIR 7771: Contemporary History of the Mid-East (3 Credit Units)

9. HIR 7781: Evolution of Modern Forms of Government (3 Credit Units)

## **Second Semester**

### Compulsory Courses

1. HIR 7612: Nation-Building in Post-Independence Africa (3 Credit Units)

2. HIR 7622: Africa and the Wider World (3 Credit Units)

3. HIR 7632: The Blacks in Diaspora (3 Credit Units)

4. HIR 7642: Research Methods and Techniques (3 Credit Units)

5. HIR 7652: M. A. Dissertation (6 Credits units)

### Electives (Choose any Two)

#### **(A) Economic History**

1. HIR 7662: Comparative Industrial Growth and Development of Japan and China (3 Credit Units)

2. HIR 7672: Capitalism, Commission and Mixed Economy (3 Credit Units)

3. HIR 7682: Economic Role of Women in African History (3 Credit Units)

#### **(B) International Relations**

1. HIR 7692: Trends in World Diplomacy (3 Credit Units)

2. HIR 7712: Globalization: Cultural and Economic Implications (3 Credit Units)

3. HIR 7722: Advanced Studies in International Law and Diplomacy since the 19th century (3 Credit Units)

## **DESCRIPTION OF COURSES**

### **HIR 7611: Theory and Methods of History**

The course treats the problems of historiography at an advanced level. The emphasis is on the practical and theoretical problems of historical reconstruction, and the varieties of history including philosophy of History, Universal History, National History and Public History. The

core and frontiers of the discipline of history are analyzed theoretically as well as through the development of historiography.

**HIR 7621: Thematic Studies in Nigerian History**

This course examines major topics in Nigeria's social, political and economic development from Independence up to present times.

**HIR 7631: Colonialism, Nationalism and Independence in Africa**

Impact of Colonialism, Internal and External factors of African Nationalism, Nationalist Movements; Philosophy of African Nationalist leaders - Nkrumah, Azikiwe, Ahmed Ben Bella, Abdel Nasar, Houghet Boigny; etc. Nationalism in Settler and Non-Settler Colonies; attainment of independence by African countries.

**HIR 7641: The Military and Politics in Africa**

The course involves analyses of the incursion of the military into the polities of African states, its socio-economic and political consequences. Ways of forestalling such incursion, an analysis of the classical view of military rule as an aberration; the military and nation building in Africa.

**HIR 7651: Economic History and Developments in Africa from the 20<sup>th</sup> century to the present**

This course examines the link between 'economics; and 'politics' in international relations; International Monetary Arrangements', The politics of International Trade; Theories of International Trade Relations; Foreign aid and Underdevelopment; the politics of the New International Economic Order.

**HIR 7661: Economic History of Nigeria since the 20<sup>th</sup> century to the present**

This course analyzes the trends and major economic developments in Nigeria from the beginning of the 20th century to date. Themes will cover both colonial and post-colonial periods, and will include the following: nature and pattern of external influence on Nigerian economic and political developments; major trends and changes in the monetary and banking sector of the economy; mining and manufacturing sector; agriculture; Nigerian Petroleum products and OPEC; indigenization, commercialization and privatization and the economy; policies of the Operation Feed the Nation; Green Revolution and River Basin Development Authorities;

Policies of austerity measures, Structural Adjustment Programme (SAP), National Directorate of Employment (NDE), DFFRI, NEEDS as well as Corruption and the economy.

### **HIR 7671: Problems and Prospects of Regional Economic Developments in West Africa**

This course examines the features of the Economy of the West African sub region; and issues in its underdevelopment. It further examines the various organizations in West Africa, which have been set up by states in the sub region to facilitate economic development. The problems and prospects of such efforts are also highlighted.

### **HIR 7681: Africa and European Imperialism (with particular emphasis on its economic implications)**

This course entails a general survey of internal and external developments in Europe and Africa that prepared the setting for European imperialism. Students will study some of the theories of imperialism as propounded by thinkers like J.A. Hobson, V.I. Lenin, D. K. Field House J.A Schumpeter. Themes to be covered include arguments regarding historical origin of imperialism, colonialism neo-colonialism. Attempts shall be made to use selected case studies.

### **HIR 7691: Land and Labour Issues in Africa (1850-1950)**

This course is about an analysis of land and labour as factors of production in the economies of African societies since the European commercial and imperial interests in Africa. Emphasis will be on the settler and non-settler colonies; the plantation economy; colonial policies on land and labour and Africans reactions to them.

### **HIR 7701: Theories of International Relations**

This module gives students an introduction to the theoretical background to International Relations and examines a range of contemporary and historical topics through which it is possible to explore the behaviour of states and international organizations. The main areas of theory will be covered and these will be related to the changing international environment in which they were developed. Major themes including national interest, realism, ideology, 'superpowers', war and co-operation will be addressed as well as the practical aspects of the subject. The course will also contrast the international behaviour of small and large states.

Students will receive additional material in class and will be encouraged to relate what they learn to developing issues.

**HIR 7711: International Institutions and Organizations**

This course examines the genesis and historical antecedents of International Organizations; The Vienna Congress, The League of Nations; The U.N.O; OAS; EEC/EU, the OAU; ECOWAS, Arab League.

**HIR 7721: The Evolution of Nigerian Foreign Policy**

This course undertakes to expose the student to the thrust of Nigerian Foreign Policy since 1960. It seeks to address the major issues that determine the basis of Nigeria's Foreign Policy and how it has affected Nigerian development as a nation.

**HIR7731: Studies on Strategic Issues: From the 20th century to Present**

This course is designed to expose students to events and issues since the second half of the 20<sup>th</sup> centuries that are of strategic relevance. Emphasis will be placed on the contribution of modern thinkers in the field to the growth of the subject matter. Such thinkers include Hitler, Mao Tse Tung, Alfred Mahan, Thomas Shelling 'Robert Mc Namara etc. Students will also be exposed to such modern concepts and theories like Games theory, theory of conflict and conflict Resolution, theories of war and peace, concept and value of Deterrence, Strategic planning, Defense policies; foreign policy analysis and the Role of science and technology on strategic thinking and planning. In addition, some attempts will be made to apply the various theories to selected case studies on a worldwide basis.

**HIR 7741: Diplomatic Process and Practice**

The course examines certain practices in the international community such as state recognition, diplomatic appointments, letters of credence and withdrawal of diplomatic immunity, language of diplomacy, reciprocity and immunity, language of diplomacy from Latin to French to English, organization and structure of Embassies. It examines also diplomatic influence and power in diplomacy.

**HIR 7751: Regionalism and New World Order**

This course assesses the origins, significance and likely evolution of the trend towards regionalism within the new world order. It analyses how states have been responding to the end of US hegemony and assesses the extent to which new regional blocs are emerging and their

nature. These questions are analyzed through detailed case studies of the three most advanced regions of the world economy - the Americas, the European Union, and East Asia - firstly from the standpoint of the 'core' state or states, and secondly from that of the 'peripheral' states.

### **HIR 7761: Environmental History from the Industrial Revolution to the United Nations Convention on Climate Change**

Think globally and act locally has been a staple of environmentalism since the 20<sup>th</sup> century. What does it mean to think globally, and historically, about the environment? How have global historical processes like industrialization, urbanization, and the agricultural revolution affected local environments? Local and individual actions have long played out in a global context. We will focus in particular on interrelated developments in climate, agriculture, energy, and cities. Through readings, writing, research, and discussion, we will examine the connection of global and local environments. Case studies will include historical responses to climate change in Europe and North America, Asia and Africa (with emphasis on local examples).

### **HIR 7771: Contemporary History of the Middle-East**

The course's aim is to allow the student a proper knowledge and understanding of the making of the contemporary Middle East. The course will focus on historical processes evolving political, intellectual and socio-economic aspects from the rise of Islam to World War II. Special attention will be given to major stages in the history of the Middle East: the Pre-Islamic era; Islam and Islamization of the Middle East; the rise and decline of the Ottoman Empire; initial westernization, Ottoman reforms and the Islamic reactions to them; the rise of nationalism; World War I and the peace settlements; European rule and the establishment of the modern states in the Middle East. The course will further discuss the rise and fall of liberal constitutionalism in the Middle Eastern states, the rise of Pan-Arabism and Muslim fundamentalism and their impact on regional and international politics. A further objective is to develop critical thinking skills on the Middle East processes.

### **HIR 7781: Evolution of Modern Forms of Government**



The course is an examination of the origins of modern forms of Government e.g. parliamentary, as it is practiced in Britain and France, and presidential system as it is practiced in USA and some African countries.

### **HIR 7612: Nation-Building in Post-Independence Africa**

This course examines the problems of nation building: the party system-the problems of one party vis-à-vis democracy; Post Independence economy; Foreign Policy Issues; Non-alignment; Non-alignment in the theory and practice; Problems of political stability, ethnicity, national boundaries, bilateral and multi-lateral relationships in Africa.

### **HIR 7622: Africa and the Wider World**

The course examines the foreign factor in the De-colonization of Africa; Independence and neo-colonialism in Africa; Africa and International Organizations like, The UNO, EEC/EU etc; the advance of Social influence in Africa; Africa and Super power politics, Africa and the New World Order etc.

### **HIR 7632: The Blacks in Diaspora**

This course considers the extensive influence and effects of African slavery particularly in the Americas. This slavery has had a critical role in the histories of not only the Americas but also, Asia, the Caribbean and Africa itself. The course will trace the origins and relevance of the term Diaspora with relevance to the issue of slavery in Americas. It will also examines condition that led to the rise of the Atlantic slave trade, lives and conditions of slaves in the new world, the movement of abolition of slavery and emancipation of slaves, the interrelations between European and descendants of slaves, the contributions of slavery to American economies and the subsequent relations between Africa-American and African continent.

### **HIR 7642: Research Methods and Techniques**

This course entails discussion on the meaning of History and Development of Historical Studies since the end of the 19th Century. This includes a survey of African historiographical traditions (Old and New), the African sources of history, choosing a research topic. Writing of research reports which includes Selection of data, organization of data, selected either according to theme or chronology or both, explanation, the issue of quotation, references, bibliography and

appendices to establish authenticity. Multi-disciplinary approach to African history; oral tradition as source of African history (kinds, problems of collecting, processing, dating and evaluating data) written sources will also be considered.

### **HIR 7652: Comparative Industrial Growth and Development of Japan and China**

This course examines the different approaches adopted by various industrial powers of the world, against their different background and setting to achieve industrial development. The third world countries can see these approaches examples for their own industrial development.

### **HIR 7672: Capitalism, Commission and Mixed Economy**

An analysis of the three types of economic system, i.e. capitalism, communism and mixed economy, explanation of the modes of production and distribution as well as the problems associated with each type.

### **HIR 7682: Economic Role of Women in African History**

This course examines the role and involvement of African women in the economy, politics, religion and the arts. Differences in the status of women from one region to another as well as changes in the role of women from pre-colonial to contemporary times will also be considered.

### **HIR 7683: Culture History**

Using data from ancillary sources and disciplines like archaeology, ethnography, art history and historical linguistics, the course seeks to impart on students the knowledge of the foundations and flowering of Nigeria's ancient civilizations. Starting from the beginning of Iron working societies to the urban civilizations of circa 1800, the focus will be on the Nok Culture, Cross River Basin (monoliths and terracotta sculptures), Igbo-Ukwu Civilisation, Ife Culture, Benin and Takusheyi – burial mounds of pre-Islamic Sarauta system in Katsina State etc.

Running through these case studies would be discussions of culture dynamics and transformation of societies. A time line of cultural developments and a panorama of Nigerian societies by the end of C. 1800 will sum up the course.

### **HIR 7692: M. A. Dissertation (To be taken in the Third semester)**

This course is a final year project of the students' choice on any related topic. The M. A. Dissertation is designed to give graduate students an opportunity for a reasonably independent research, with the supervisor providing only essential guidance

## **2.2 COLLEGE OF MANAGEMENT SCIENCES**

### **2.2.1 Department of Accounting**

#### **i. Postgraduate Diploma (PGD) in Accounting**

##### **Philosophy:**

The Post-Graduate Diploma (PGD) programme in Accounting is designed for university and polytechnic graduates who need a diploma preparation before embarking on a Masters degree programme in Accounting or related fields. It is aimed at bridging the knowledge gap for the requisite skill to adapt to further studies and research.

##### **Objectives**

The PGD Programme in Accounting is designed to:

- (a) Inculcate the requisite intellectual/conceptual foundations that will permit meaningful participation in the discussion or resolution of the problems which confront the accounting discipline in the contemporary world;
- (b) Encourage research into problems which impede the maximum contribution of accounting to national development and well-being of the people; and
- (c) Develop skill in logical reasoning and critical analysis and improve the capacity of students in formulating sound accounting policies and strategies.

##### **List of Academic Staff**

<b>S/No.</b>	<b>NAME OF ACADEMIC STAFF</b>	<b>AREA OF SPECIALIZATION</b>	<b>DISCIPLINE</b>	<b>QUALIFICATION</b>	<b>RANK</b>
1.	Prof. M. Kwanashie	Economic Theory	Economics	PhD , M.A, B. Sc.	Professor/Vice-Chancellor
2.	Prof. C. S. Ige	Econometrics; Business	Economics	PhD, M.Sc, B.Sc.	Professor/Dean, College of

		Mathematics			Postgraduate Studies
3.	Prof. S.O. Unyimadu	Business Administration	Business Administration	PhD, MBA, B.Sc.	Professor/Dean, College of Management Sciences.
4.	Dr. Tobechei Agbanike	Financial Economics, Tax, Corporate Finance.	Accounting and Economics	PhD, M.Sc, B.Sc, ACA, ACTI.	Lecturer II /Ag. HoD
5.	Prof. Ugwudioha Matthias Ofili	Accounting and Finance	Accounting and Finance	PhD Bus Admin, MBA Fin Mgt, MSc Accounting	Professor
6.	Rev. Fr. Bar. Prof. John Gangwari	Business Law, Commercial Law, Ethics	Law	DCL, STL, B.D, B.Phil, LL.B (Hons). B.L.	Professor
7.	Dr I. N Tsegba	Accounting and Finance	Accounting and Finance	PhD, M.Sc, B.Sc, CNA.	Associate Professor
8.	Dr. F. A. Ayatse	Management	Management	PhD, MBA ,B.Sc.	Associate Professor
9.	Dr. J. P. Uko	Marketing, Management, and Entrepreneurship	Business Administration (Marketing Management)	PhD, M. Sc, B. A. (1 <sup>st</sup> Class Hons.)	Senior Lecturer/ Director of Consultancy Services
10.	Dr.E. O. Ozoh	Accounting & Finance	Accounting & Finance	PhD, MBA, B.Sc, FCNA.	Senior Lecturer
11.	Dr. J. U. Azubike	Accounting & Finance	Accounting & Finance	PhD. M. Sc, MBA, B. Sc, FCA ; ACTI .	Senior Lecturer
12.	Dr. ANGAHAR, Paul Aondona	Accounting & Finance	Accounting & Finance	Ph.D, M.Sc, B.Sc, PGDE, CNA	Senior Lecturer

13.	Dr. Mrs. Maria -Assumpta O. Eduok-Akpan	Operations Research, Statistics	Mathematics, Statistics, Operations Research	PhD, M. Eng., M. Sc, B. Sc.	Senior Lecturer
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### **Requirements for Admission**

1. A good degree (not below third class) in accounting or accounting related areas (e.g. Business Administration, Banking and Finance, Marketing, Insurance and others as may be determined by the College) from a reputable University.
2. Higher National Diploma (at Credit Level) in accounting or accounting related areas (as in 1 above) from a reputable Polytechnic.
3. Professional qualifications in Accounting such as ACCA, ACA, ACMA, ACIS, CNA, CPA, etc deemed equivalent to 1 and 2 above.
4. In addition to (I) - (3), candidates must possess five ordinary level credit passes including English Language, Mathematics and Economics and satisfy the University's general requirements for matriculation.

### **Requirements for Graduation**

In addition to Veritas University general requirements for graduation, a candidate must offer and pass 40 Units made up of 34 Units of course work and 6 Units of thesis and have minimum CGPA of **3.00**.

### **Duration**

The programme, which runs on full time basis, requires a minimum duration of 12 months and a maximum of 24 months for both Course work and research Project. Therefore, a candidate must pursue his/her studies for not less than two semesters and not more than four semesters from date of registration.

### **PGD Final Project**

The student will be required to produce an original essay having the following:

- a. An empirical study of a real business phenomenon of interest to the society and the world at large;
- b. A definite contribution to knowledge; and
- c. Valid conclusion that is relevant to practical solution of real-life business problems.

The Project shall be submitted before the award of the Diploma.

### **Grading of Work**

The courses shall be graded as follows:

#### **Grade Points Characteristic**

A	Excellent	70-100	A distinguished result that is excellent with regard to the following aspects – theoretical depth, practical relevance, analytical ability and independent thought.
B	Very good	60-69	A very good result with regard to the above mentioned aspects.
C	Good	50-59	The result is of a good standard with regard to the above mentioned aspects and lives up to expectations.
F	Fail	0-49	The result does not meet the minimum requirements with regard to the above mentioned aspects

### **Mode of Study**

The programme is based on course work and submission of research project in accordance with the conditions laid down by the College of Postgraduate Studies. It is to be run on full time basis.

### **Course Work**

The course work covers a period of twelve months (two semesters).

### **Detailed Course Structure for PGD in Accounting**

The PGD programme requires a minimum of 44 credit units made as follows:

- Thirteen core courses 34 units

- Project
- Total

6 units  
40 units

### First Semester

S/No.	Course Code	Course Title	Units	Status
1.	ACC 5111	Financial Accounting I	3	Compulsory
2.	ACC 5211	Cost Accounting	3	Compulsory
3.	ACC 5311	Quantitative Methods in Business	3	Compulsory
4.	ACC 5411	Auditing and Investigation	3	Compulsory
5.	BUS 5111	Principles of Management	2	Compulsory
6.	BUS 5121	Research Methodology	3	Compulsory
7.	FIN 5111	Financial Management	3	Compulsory
		<b>Total</b>	<b>20</b>	

### Second Semester

S/No.	Course Code	Course Title	Units	Status
1.	ACC 5122	Financial Accounting II	3	Compulsory
2.	ACC 5222	Management Accounting	2	Compulsory
3.	ACC 5322	Management Information System	2	Compulsory
4.	ACC 5422	Financial Reporting and Ethics	2	Compulsory
5.	ACC 5512	Tax and Tax Management	3	Compulsory
6.	ACC 5632	Research Project	6	Compulsory
7.	LAW 5112	Commercial Law	2	Compulsory
		<b>Total</b>	<b>20</b>	

### Description of Courses

#### First Semester

**ACC 5111 Financial Accounting I (3 Credit Units)**

Accounting Concepts and Conventions, Procedure and System. Double Entry Principle. Journals and Ledger accounts. Bank Reconciliation & Control Accounts. Single Entry Accounting and Incomplete records. Final Accounts including year end Adjustments. Accounts of Sole Proprietorships, Clubs and Societies. Manufacturing Accounts, Departmental Accounts, Branch Accounts (excluding foreign branch). Partnerships and Limited Liability Companies. Share Capital of Limited Liability Companies – Issue, Redemption and Forfeiture of Shares. Published Accounts of Companies. Interpretation of Accounts.

**ACC 5211 Cost Accounting (3 Credit Units)**

Nature and Classification of costs & Costing Systems. Elements of Cost. Inventory Control Models. Cost Audit – Material Purchases, Stores, Labour Cost. Overhead Cost, Methods and Systems Audit. Costing Methods – Job & Batch costing. Contract costing. Single or Output costing.

**ACC 5311 Quantitative Techniques for Business Decisions (3 Credit Units)**

This course introduces the students to the tools of management science methodology and their applications in analyzing varieties of business decision problems. The course content will focus on mathematical programming and their applications to special types of problems in business management - product mix problems, the transportation problem, and assignment problems. Network models and their applications in project management; Dynamic programming; Game theory and its applications in management decision situations; Decision theory, queuing theory and inventory models are covered.

**ACC 5411 Auditing and Investigation (3 Credit Units)**

Nature of auditing; Purpose and types of audits; Internal and external auditors; Internal control; Appointment, duties and rights of Auditors; Verification of assets and Liabilities; Object and form of audit report; Planning and control of audits; audit working papers. Auditor's Liability – Duty of care. Civil and Criminal Liability under statute & Common Law. Auditing Computerized Accounting System: Differential between manual and computer systems, understanding of internal control in an EDP system. Computer Assisted Audit Techniques



(CAAT) applications and computer service bureau. Investigations: Distinction between auditing and investigations, the nature of investigations, and the report appropriate to each type of investigation. Forensic Auditing: definition, Fraud management and control in banks, Hotel and Restaurant, manufacturing concerns and other services organization.

**BUS 5111 Principles of Management (2 Credit Units)**

This course is a general introduction to the concepts and principles underlying management behaviour and decision-making processes in business and non-business organizations. The course will also emphasize the evolution of management thought/theories and the practice of management in the developing countries. The topics covered will include the role and significance of management in a modern enterprise and the primary managerial activities of planning, organizing, staffing, coordinating, motivating, directing, and controlling. Other topics will include the emergence of the scientific management school, the human relations school, participatory management, the systems approach, and the contingency theories of management. Others are Theory X and Theory Y, Theory Z, Management by Objectives, and strategic management.

**BUS 5121 Research Methodology (3 Credit Units)**

The course introduces students to the basic principles of conducting empirical research in business. Topics covered include basic concepts in scientific enquiry, meaning and importance of research in business and related disciplines, basic types of research, and basic concepts in research, such as variables, concepts, constructs, measurement, propositions, models, theories, laws, and so on. Choosing a topic for research, literature review, and various methods of collecting data; Treatment of pre-gathered data, testing of hypothesis, and writing a research report, ethical Issues as well as the problems of conducting business research in Nigeria will be examined.

**FIN 5111 Financial Management (3 Credit Units)**

Nature and theory of financial management. Investment Decision, Dividend Decision, Financing Decision. capital investment decision. Introduction to Portfolio Management. Security Selection and Maximization of Portfolio performance. Theory of Security Markets. Cash flow analysis:

current and fixed assets. Balance sheet depreciation and Amortization. Nature and Scope of a firm, problems of corporate business organization in Nigeria. The role of Nigerian Stock Exchange in corporate ownership spread. Merger, Acquisition Integration and consolidation. Nature and scope of working capital.

### **Second Semester**

#### **ACC 5122 Financial Accounting II (3 Credit Units)**

Selected Accounts – Manufacturing Accounts. Incomplete Records. Accounts of Non-trading Organizations. Departmental and Joint Venture Accounts. Partnership Accounts – Admission, Retirement and Dissolution. Introduction to Group Account – Nature and Principles of Consolidated Accounts. Group Profit & Loss Accounts and Balance Sheet. Simple Illustrations. Liquidation and Dissolution of Companies - Voluntary and Compulsory Liquidation. Provisions of CAMA 1990.

#### **ACC 5222 Management Accounting (2 Credit Units)**

Costing Methods – Process, joint and By-Product Costing. Introduction to Planning and Control systems – Budget and budgetary control, Master budget/ planning, Management control, Variable costing, Profit/volume planning (Break-even Analysis,).Standard costing. Material and Labour Variances.

#### **ACC 5322 Management Information System (2 Credit Units)**

Meaning, Objective and Requirement of MIS in organizations; Information needs of management and design of MIS, Introduction to, and Fundamentals of Data Processing – brief history and conventional data processing methods; Manual methods and mechanized methods. Classification of systems and their relative merits. Closed loop and open loop systems: effect on time-lag: the total system approach and objectives; total systems and subsystems. Data processing and Management Information System (MIS). The organization of MIS including the use of mechanical and electronic accounting machines, flow charting, networking systems analysis and the principles of system design techniques and documentation. Managerial uses of the information output as a basis for developing criteria and systems. Information need of management and design of MIS. The computer environment and use of computer based

techniques Computer system Input, output and central processing unit. Hardware and Software, Introduction to common Computer Programming languages used in business (COBOL, FORTRAN, SPSS etc.) Electronic Data Processing (EDP) methods; batch processing, real-time processing and the management of EDP. Business Systems hierarchical structure of Organizations; the sub-optimisation issue. Other topics covered are: Computer reports: - error reports, exception reports, and so on, report format, and form design; User environment in systems development and life cycle; Computer service bureau and cyber services; office automation; Email, internet, and so on.

**ACC 5422 Financial Reporting and Ethics (2 Credit Units)**

This unit is intended to provide a detailed understanding of the contemporary Nigerian financial reporting environment. Particular attention is paid to accounting theory and concepts, mandatory reporting practices and reporting policies that reflect either a choice from among several mandated alternatives, or those areas where regulation has not occurred; regulatory framework of financial reporting-accounting standards setting process, Nigerian Accounting Standards Board (NASB) and International Accounting Standards Board (IASB), authority of NASB and IASB, accounting and reporting policies, disclosure of accounting policy, preparing and reporting information for financial statements and notes, Interpretation and evaluation of financial information and disclosures. Compliance requirements of standards issued by NASB, IASB and IFAC. International Financial Reporting Standards (IFRS). Concepts and types of ethics, principles and application of professional ethics.

**ACC 5512 Tax and Tax Management (3 Credit Units)**

Development of Taxation in Nigeria. Review of Nigerian Tax Laws: ITMA, CGTA, CITA, PPTA, etc. Income Tax Administration in Nigeria, FBIR, SBIR, JTB, etc. Personal Income Tax, Ascertainment of Assessable Profit. Capital Allowance, Loss Relief.. Company Income Tax., Double Taxation Relief. Pioneer Industries. Offences and Penalties. Capital Gain Tax, Value Added Tax, and Petroleum Profit Tax. Fiscal policy and Taxation in developed countries.

**ACC 5632 Research Project (6 Credit Units)**

This is a research work on acceptable Accounting topics. Each candidate shall orally defend his/her completed project before an appropriately constituted panel of examiners. Bound copies

shall be submitted in line with the College of Postgraduate Studies' guidelines on Postgraduate Diploma research Projects.

**LAW 5112 Commercial Law (2 Credit Units)**

The Nigerian Legal System: Sources of Nigerian Law; Hierarchy of Nigerian Courts; Commercial Arbitration. Law of contracts including special contracts involving use of negotiable instruments; Law of Agency (Types of Agents, rights/duties of Agents and Principals etc); Hire purchase (meaning, ownership, passing of property etc); Sale of goods; Insurance; Bankruptcy law; Developments in Company (including banking and Insurance) Laws in Nigeria; Unfair Competition; Passing off and "Trade Libel".

## 2.2.2. DEPARTMENT OF MARKETING AND ADVERTISING

### i. Post-graduate Diploma (PGD) in Marketing

#### Philosophy

The Department of Marketing and Advertising, Veritas University, Abuja (The Catholic University of Nigeria) offers a Post-Graduate Diploma programme in Marketing (PGD Marketing).

#### Objectives

The objectives of this programme among others:

- i. Prepares qualified non-business graduates of Veritas University, Abuja and other Universities or higher institutions entry into the University's Master of Business Administration (MBA) programme, the M.Sc. in Marketing programme, or other Postgraduate programmes in the candidate's chosen field of study.
- ii. Prepares students for managerial positions in their chosen fields in public and private sector organizations.

#### List of Academic Staff:

S/ No	NAME OF ACADEMIC STAFF	AREA OF SPECIALIZATION	DISCIPLINE	QUALIFICATION	RANK
1.	Prof. M. Kwanashie	Economic Theory	Economics	PhD (Economics), McGill; M.A (Economics), Northwestern; B. Sc (Economics), ABU.	Professor/Vice-Chancellor

2.	Prof. C. S. Ige	Econometrics; Business Mathematics	Economics	PhD (Qualitative/Devpt Econs), Strathclyde, Glasgow,; M.Sc (Econs), Ibadan; B.Sc (Econs), Ibadan.	Professor/Dean, College of Postgraduate Studies
3.	Stephenson Okwuchukwu Unyimadu	Business Administration	Business Administration	PhD	Professor
4.	Dr. Tobeche Agbanike	Financial Economics, Development Economics, Corporate Finance & Accounting	Accounting and Economics	PhD (Devpt Economics), UNIPORT; M.Sc (Monetary Economics), UNIPORT; B.Sc (Bus. Admin), UNILAG; ACA, ACTI.	Lecturer II /Ag. HOD
5.	Prof. Ugwudioha Matthias Ofili	Accounting and Finance	Accounting and Finance	PhD Bus Admin, MBA Fin Mgt, B.Sc Accounting	Professor
6.	Prof. MAIMAKO, Sebastian Seddi	Accounting & Management	Accounting & Management	B.Sc (Mgt), MBA, Ph.D (Mgt), ACA	Professor
7.	Rev. Fr. Bar. Dr. John Gangwari	Business Law, Commercial Law, Ethics	Law, Theology and Philosophy	J.GD (Ph.D) Canon Law; J.C.L; B.D; B.Phil; LL.B (Hons); B.L.	Associate Professor
8.	Dr I. N Tsegba	Accounting and Finance	Accounting and Finance	PhD (Accounting & Finance), BSU; M.Sc (Accounting & Finance), ABU; B.Sc (Accounting), ABU, CNA.	Associate Professor

9.	Dr. F. A. Ayatse	Management	Management	PhD (Management), BSU; MBA (Management), Usman Danfodio; B.Sc (Management), Usman Danfodio.	Associate Professor
10.	Dr. ACHUA, Joseph Kwaghkor	Accounting, Banking & Finance	Accounting, Banking & Finance	B.Sc (Accountancy), MBA, M.Sc (Banking & Finance), Ph.D (Banking & Finance), ACA.	Associate Professor
11.	Dr. J. P. Uko	Marketing, Management, and Entrepreneurship	Business Administration (Marketing, Management)	PhD (Bus Admin—Marketing), Illinois;; M. Sc (Bus. Admin—Marketing), Illinois; B. A. (1 <sup>st</sup> Class Hons.) (Management and Administration), Dar es Salaam.	Senior Lecturer/ Director of Consultancy Services
12.	Dr. E. O. Ozoh	Accounting & Finance	Accounting & Finance	PhD (Economics), Unical; MBA (Finance), UNN; B.Sc (Accountancy), UNN; FCNA.	Senior Lecturer
13.	Dr. J. U. Azubike	Accounting & Finance	Accounting & Finance	PhD (Accounting); M. Sc (Accounting); MBA (Finance); B. Sc (Accountancy), UNN; FCA ; ACTI .	Senior Lecturer
14.	Dr. ANGAHAR, Paul Aondona	Accounting & Finance	Accounting & Finance	B.Sc (Bus Admin), M.Sc (Accounting & Finance), Ph.D (Accounting & Finance), PGDE, CNA	Senior Lecturer
	Dr. Mrs. Maria-	Operations Research,	Mathematics, Statistics,	PhD (Industrial Eng./Operations Research); M.	Senior Lecturer

15.	Assumpta O. Eduok-Akpan	Statistics	Operations Research	Eng. (Industrial Eng./Operations Research), Uniben; M. Sc. (Mathematics), Ibadan,; B. Sc. (Mathematics), Nsukka.	
16.	Dr. Sunday Mlanga	Management Accounting	Accounting	PhD, Management Accounting	Senior Lecturer
17.	Austin D. Osuhor	Business Administration	Business Administration	PhD	Senior Lecturer
18.	Alfred J.M Edema	Business Management	Business Administration	PhD	Senior Lecturer

### **Admission Requirements**

All candidates for the Post-Graduate Diploma in Marketing are required to satisfy the following conditions before they are admitted into the programme.

#### **a. Previous Training**

They must be holders of the following qualifications:

- i. Five credit passes at the GCE/WAEC/NECO examinations, which must include English language and Mathematics at the 'O' level as the basic requirement.
- ii. B.Sc./B.A. Honours Degree of Veritas University, Abuja in the Social Sciences, Natural and Applied Sciences, and the Humanities or similar degrees in these disciplines, as well as Engineering and Health Sciences from any other University recognized by the Senate of Veritas University.
- iii. HND in Business Administration with 'merit' or 'credit' from a recognized institution.
- iv. Finals of other acceptable professional qualifications.

#### **b. Application Form**



All candidates must obtain, properly complete, and submit appropriate application forms for the programme with the relevant documents as required by the Post-Graduate School of Veritas University, Abuja.

**c. Entrance Examination**

Candidates for Post-Graduate Diploma in Marketing must take an entrance examination specifically designed for the programmes and obtain a pass mark in the examination.

- d.** All other conditions that apply to other PGD programmes in Veritas University, Abuja must be observed.

**Duration of the PGD programmes**

The Postgraduate Diploma in Marketing programme is designed to be completed in two semesters by students undertaking full-time studies and in three semesters, including the “summer” semester (that is, 12 calendar months), by students undertaking part-time studies offered in the evenings and weekends. Students may be admitted into the programme in any of the regular semesters. The full-time PGD (Marketing) programme is fully residential.

**Conditions for the Award of PGD**

To be eligible for the award of the PGD degree of Veritas University, Abuja, the candidate must satisfy the following conditions:

- i. Be registered in the programme for the duration of study.
- ii. Complete 30 credit units of relevant course work in the programme with a ‘C’ average or above.
- iii. Demonstrate a good general knowledge of basic business principles, and good communication ability.
- iv. Display good moral conduct and character.

**Detailed Course Structure for PGD in Marketing**

**Course Structure**

The Post-Graduate Diploma in Marketing is made up of 13 courses of 2 credit units each and a Research Project or Long Essay having 4 credit units, making a total of 30 credit units. The breakdown of the courses is as follows:

<u>Common courses</u>	<b>Credit units</b>
BUS 5111 Principles of Management	2

BUS 5121 Research Methodology	2
BUS 5131 Business Mathematics & Statistics	2
BUS 5142 Quantitative Techniques for Business Decisions	2
ECO 5111 Principles of Micro Economics	2
ECO 5122 Principles of Macro Economics	2
<b>MKT 5692 Research Project/Long Essay</b>	<b>4</b>
<b>Total</b>	<b>16</b>

**A) Fourteen (14) credit units made up of compulsory and elective courses taken in Marketing are as follows:**

<u>Compulsory courses</u>	Credit units
MKT 5111 Fundamentals of Marketing	2
MKT 5122 Introduction to Marketing Management	2
MKT 5231 Introduction to Marketing Communication	2
MKT 5342 Introduction to Distribution Management	2
MKT 5452 Introduction to Consumer Behaviour	2
<b>Total</b>	<b>10</b>

<u>Elective courses</u>	Credit units
MKT 5461 Introduction to Marketing Research	2
MKT 5571 Introduction to International Marketing	2
MKT 5382 Introduction to Sales Management	2
MKT 5192 Introduction to Strategic Marketing Management	2
<b>Total</b>	<b>6</b>
<b>Grand Total</b>	<b>30</b>

### **Course Description**

**BUS 5111: Principles of Management (2 credit units):** This course is a general introduction to the concepts and principles underlying management behaviour and decision-making processes in business and non-business organizations. The course will also emphasize the evolution of management thought/theories and the practice of management in the developing countries. The topics covered will include the role and significance of management in a modern enterprise and

the primary managerial activities of planning, organizing, staffing, coordinating, motivating, directing, and controlling. Other topics will include the emergence of the scientific management school, the human relations school, participatory management, the systems approach, and the contingency theories of management. Others are Theory X and Theory Y, Theory Z, Management by Objectives, and strategic management.

**BUS 5121: Research Methodology (2 credit units):** The course introduces students to the basic principles of conducting empirical research in business. Topics covered include basic concepts in scientific enquiry, meaning and importance of research in business and related disciplines, basic types of research, and basic concepts in research, such as variables, concepts, constructs, measurement, propositions, models, theories, laws, and so on. Choosing a topic for research, literature review, and various methods of collecting data; Treatment of pre-gathered data, testing of hypothesis, and writing a research report as well as the problems of conducting business research in Nigeria will be examined.

**BUS 5131: Business Mathematics and Statistics (2 credit units):** Basic notions in Numeric Analysis: the number systems; integers, properties of integers, rational and irrational numbers, complex numbers. Mathematics and symbolic logic: Inductive and deductive systems, etc. Differential Calculus. Rules and techniques of differentiation; application to marginal analysis, cost functions, indifference curves, and so on. Integral Calculus. Applications and illustrative examples from management sciences. Descriptive and inferential statistics as applied in business. Topics covered include basic concepts in descriptive statistics and a study of the methods of making inferences or drawing conclusions from sample data to the statistical population from which the sample is drawn and making decisions or predictions about population parameters of interest based on sample data. Sources and nature of published statistical data in Nigeria, their uses and limitations.

**BUS 5142: Quantitative Techniques for Business Decisions (2 credit units):** This course introduces the students to the tools of management science methodology and their applications in analyzing varieties of business decision problems. The course content will focus on mathematical programming and their applications to special types of problems in business management - product mix problems, the transportation problem, and assignment problems. Network models and their applications in project management; Dynamic programming; Game

theory and its applications in management decision situations; Decision theory, queuing theory and inventory models are covered.

**BUS 5152: Computer Applications in Business (2 credit units):** The course covers the aims, objectives, and the structure of computer packages; Difference between packages and conventional programming language, capabilities and limitation of packages, types/class of packages (word processor, spreadsheet, graphic animation, 3D, utilities, and database) as well as practical use of Windows, Word, Excel, Power Points, and Access. Students are expected to study and practice intensively any five current software packages.

**ECO 5111: Principles of Micro Economics (2 credit units):** Micro-economic theory, problem of scarce resources and allocation of resources in product and factor markets with application to Nigerian and other economics; equilibrium concept, possibility of disequilibrium, partial equilibrium and general equilibrium analysis; Supply and demand theory; Cobweb theory; Introductory dynamics; Consumer behavior; General equilibrium of exchange; Production theory. Cost curves; Pricing and output under perfect competition, imperfect competition, monopoly and monopolistic competition; Pricing of production factors and the theory of comparative costs are covered.

**ECO 5122: Principles of Macro Economics (2 credit units):** Macro-economic theory, national income accounting, macro-economic aggregates, the classical system, the Keynesian system, the monetarist system, domestic economic stabilization, monetary and fiscal policies, price control and inflation are topics covered.

**MKT 5111: Fundamentals of Marketing (2 credit units):** This course is designed to introduce students to the basic principles involved in the study of marketing as an academic discipline, a profession, and a business function and treats in depth the behavioural aspects and the macro issues of marketing. Issues covered include the nature and development of the marketing mix variable (product, price, promotion, and distribution) by the firm and the functions of marketing in corporate management.

**MKT 5122: Introduction to Marketing Management (2 credit units):** This course examines the major tasks of marketing management as performed by the company executives responsible for the marketing function. The course focuses particularly on the application of the basic management principles of planning, organizing, and coordinating the activities of the company's

marketing personnel to choose target markets and to get, keep, and grow customers through creating, delivering, and communicating superior customer value. The study of electronic marketing—conducting marketing transactions, the sharing of business information, and the maintenance of business relationships with target customers using the platforms provided by the environment of the Internet—will also be investigated in this course.

**MKT 5231: Introduction to Marketing Communication (2 credit units):** This course provides some foundation for the study of mass communication and advertising. It is designed to aid the student to understand the concept, nature, and role of the mass media and the advertising industry in shaping views, modifying behaviour, and helping to fashion societal values and consumption norms. Different forms of Advertising; Balancing Advertising and Sales Promotional Expenditures; Economic and Social Criticisms of Advertising and Marketing response to them. The conceptual, theoretical, and evaluative aspects of mass media and human communication will also be examined.

**MKT 5342: Introduction to Distribution Management (2 credit units):** This is a study of the broad range of marketing functions, which include warehousing, inventory management, order processing, and transporting and handling of goods, which are performed to facilitate efficient movement of finished products and their ownership from the manufacturer's production facilities through the distribution channels to the final consumers. The course will also study business logistics—activities that include procurement and movement of materials, parts and components, and materials handling during the manufacturing processes.

**MKT 5452: Introduction to Consumer Behaviour (2 credit units):** This course the foundation for the study of consumer behaviour. Coverage includes the consumer decision process and the extant theories and models of consumer behaviour, consumer information processing, and consumer decision making. Other topics include the individual level, family, psychosocial, cultural as well as situational variables influencing consumer behaviour and consumer decision-making. Others are the laws and regulations affecting consumer behaviour, the problems consumers face in the Nigerian marketplace, and consumer education.

**MKT 5362: Introduction to Marketing Research (2 credit units):** This course is designed to deepen the student's knowledge of, and competence in, applying the basic principles and procedures of scientific research to the analysis and understanding of marketing problems. Topics to be treated include: Determining Information Needs of Marketing Management,

Determining the Value of Marketing Research Information, Designing a Marketing Research Project, Research Design, Sampling Procedures, Questionnaire Design, Field Data Collection, Basic Experimental Designs in Marketing, and the Research Report.

**MKT 5571: Introduction to International Marketing (2 credit units):** This course examines the nature and scope of international marketing and the concepts, theories, and practices in multi-country marketing. Why countries engage in international marketing. Theories of international trade. Classical trade theory: Mercantilism and Nation building. Free trade—the theory of absolute advantage, the theory of comparative advantage. The assumptions of classical trade theory. Modern trade theory—factor proportions and factor intensity, reciprocal demand and supply. Globalizations of markets; terms of trade and the problems of unequal exchange, balance of payments, the effects of tariffs, and the international organizations influencing international business and international trade, and international business—WTO, ECOWAS, and so on; international market entry strategies; business opportunity analysis in international markets; development of international marketing strategies; and standardization and adaptation of international marketing.

**MKT 5382: Introduction to Sales Management (2 credit units):** A study of the techniques of managing company sales and the firm's sales personnel. An overview of the personal selling function and its management. Personal selling processes. In-depth examination of the basic tasks of selling. Types of selling jobs and the selling environment. Building the sales organization. Attributes, duties, and responsibilities of a sales manager. Demand and sales forecasting. Recruitment, selection, training, and development of the sales personnel. Compensation of salespersons. Sales territory management and sales analysis. Recent trends in sales management practices. The course also combines a study of the application of the basic principles and tools of management to the sales promotion function of the organization. The course will call for an in-depth examination of the different tools a company uses in its consumer, trade, and sales force promotional programmes as well as the measures of their effectiveness. The topics to be treated include nature, scope, objectives and varieties of marketing sales promotions, Promotional Effectiveness, Balancing Promotional Expenditures; Economic and Social Issues Connected with Promotions.

**MKT 5192: Introduction to Strategic Marketing Management (2 credit units)**

A study of how marketing managers conceive, develop, and implement long range marketing game plans focusing on the strategic decisions the firm must make in order to compete effectively in their chosen product markets, survive profitably, and achieve the desired performance in a constantly changing business environment. The course treatment emphasizes marketing strategy formulation, implementation, and evaluation, which summarize the critical strategic marketing activities that enable the company to achieve its desired performance objectives. The skills usually associated with successful marketing strategy implementation will be identified and analyzed in detail. The pedagogical method combines the normal classroom lectures and tutorials with the case method.

**MKT 5692: Research Project/Long Essay (4 credit units)** In this course, the student, under the supervision of an assigned member of staff, undertakes a research project in order to gain practical knowledge of, and demonstrate competence in, designing and executing an original study or empirical research on a topic chosen from his or her area of specialization in Marketing. The student writes a research report on the project topic, which is expected to demonstrate and improve upon the skills and knowledge acquired on the subject matter and submits bound copies at the end of the second semester to earn a grade.

### **Grading**

A student will be graded according to the already established University grading guidelines as follows:

- A- 70% and above
- B- 60% - 69%
- C- 50% - 59%
- D- 45% - 49%
- F- 44% and below

There is no provision for probation or deferment of studies in the PGD (Marketing) programme. In addition, no course offered in the PGD (Marketing) programme shall be used as part of credit load courses in the University's MBA programme in the future.

### **3.0 COLLEGE OF NATURAL AND APPLIED SCIENCES**

#### **3.1 Department of Pure and Applied Chemistry**

##### **i. Master of Science (MS.c) in Chemistry**

###### **PHILOSOPHY**

The Postgraduate programme of the Department of Pure and Applied Chemistry is designed to produce well equipped chemists for various research centres, industries and other establishments within and outside Nigeria. The programme will also prepare graduates for career in the Universities, Polytechnics, Colleges of Education and other institutions of higher learning. The courses are therefore designed to give a balanced overview of the discipline at Master's (M.Sc.) level. It is hoped that the programme will enable the students on graduation to have the knowledge and acquire the skills which will equip them to take full responsibilities of management in industrial establishment, research and academic institutions.

###### **OBJECTIVES**

To actualize the vision, the department shall lay emphasis on academic and research-oriented programmes that will lead to personal and project development such as:

- (i) Training the students in advanced contemporary methods that will equip them to carry out researches in their areas of specialization.
- (ii) Equipping the students with skills that will enable them identify, analyze and control wastes in the environment.
- (iii) Modifying locally available raw materials and wastes into industrial input.
- (iv) Synthesizing and/or formulating new industrial and commercial products using locally available feedstock.
- (v) Utilizing available natural resources/solid minerals to manufacture materials needed for the upkeep of man.



- (vi) Providing well-equipped chemists required at the universities and other institutions of higher learning and
- (vii) Meeting the manpower needs of non-academic institutions; for this purpose a post-graduate diploma programme in applied chemistry is also available.

### **ADMISSION REQUIREMENT**

Admission into M.Sc programme is open to candidates with B.Sc. degree from the Veritas University or any other recognized university within and outside Nigeria, recognized and approved by the senate of the Veritas University. Such prospective students must have had five credit passes including Chemistry, Physics, English language and Mathematics at the School Certificate level and who also score a minimum of 3.0 CGPA in his / her first degree or 3.5 CGPA in his /her PGD programme.

### **GRADUATION REQUIREMENT**

#### **Minimum No. of years for graduation:**

- (a) M.Sc programme shall last for minimum of one (1) calendar year and a maximum of two calendar (2) years for full-time candidates.
- (b) Part-time candidates will be required to spend a minimum of two (2) calendar years and a maximum of four (4) calendar years.

Students must register and pass all stipulated and relevant courses. Each student's performance shall be based on:

- (a) Continuous assessment and final examination in the taught courses
- (b) Assessment of seminars
- (c) Assessment of Project

### **LIST OF EXISTING ACADEMIC STAFF FOR THE PROGRAMME**

<b>NAME OF ACADEMIC STAFF</b>	<b>AREA OF SPECIALIZATION</b>	<b>DISCIPLINE</b>	<b>QUALIFICATION</b>	<b>RANK</b>
Ogbonnaya Ofor	Surface Chemistry	Chemistry	B.Sc., M.Sc.,	Professor

Chukwunoye M. Ojinnaka	Organic Chemistry (Natural Product)	Chemistry	Ph.D B.Sc. Ph.D	Professor
Casmir E. Gimba	Polymer Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Professor Senior Lecturer
Innocent C. Nnorum	Analytical/Environmental Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Lecturer II
Stephen E. Abechi	Physical Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Lecturer II
Friday G. Okibe	Analytical Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Lecturer II
Ini P. Ekpe	Biochemistry (Clinical)	Biochemistry	B.Sc., M.Sc., Ph.D	Assistant Lecturer
Victor E. Ebiekpe	Physical Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Tutorial Assistant
Uchechukwu A. Ogwuda	Organic Chemistry	Chemistry	B.Sc., M.Sc. B.Sc., M.Sc. B.Sc., M.Sc.	

## SEMESTER COURSE STRUCTURE FOR THE DIFFERENT AREAS OF SPECIALIZATION

All M. Sc students shall register, in the first semester of their first academic year and pass at a minimum of C grade (in 5.0 scales), the following courses:

### 1 PHYSICAL CHEMISTRY COURSES

**A First Semester Compulsory Courses**

- i. CHM 6411 Advanced Thermodynamics
- ii. CHM 6421: Advanced Theoretical Chemistry
- iii. CHM 6431: Advanced Electrochemistry
- iv. CHM 6441 Advanced Chemical Kinetics

**One (1) Elective Course:**

**B Second Semester Compulsory Courses**

- i. CHM 6452: Quantum Chemistry
- ii. CHM 6442: Advanced Colloids and Surface Chemistry
- iii. CHM 6462: Applied Spectroscopy

**Two (2) Elective Courses:**

**Elective Courses:**

- CHM 6531: Separation Methods
- CHM 6222: Organic Reaction Mechanism
- CHM 6332: Inorganic Reaction Mechanism

**2 INORGANIC CHEMISTRY COURSES**

**A First Semester Compulsory Courses**

- i. CHM 6411 Advanced Thermodynamics
- ii. CHM 6311: Coordination Chemistry
- iii. CHM 6321: Organometallic Chemistry
- iv. CHM 6361: Non-aqueous Solvents

**One (1) Elective Course:**

**B Second Semester Compulsory Courses**

- i. CHM 6332: Inorganic Reaction Mechanism
- ii. CHM 6462: Applied Spectroscopy
- iii. CHM 6352: Nuclear Chemistry

**Two (2) Elective Courses:**

**Elective Courses:**

CHM 6341: Bio-Inorganic Chemistry

CHM 6372: Bonding in Non-transition Elements

CHM 6382: Molecular Polyhedral

**3 ORGANIC CHEMISTRY COURSES**

**A First Semester Compulsory Courses**

- i. CHM 6411 Advanced Thermodynamics
- ii. CHM 6211: Advanced Organic Chemistry
- iii. CHM 6231: Organic Photochemistry
- iv. CHM 6241: Natural Products

**One (1) Elective Course:**

**B Second Semester Compulsory Courses**

- i. CHM 6222: Organic Reaction Mechanism
- ii. CHM 6462: Applied Spectroscopy
- iii. CHM 6252: Organic Synthesis

**Two (2) Elective Courses:**

**Elective Courses:**

CHM 6531: Separation Methods

CHM 6262: Heterocyclic Chemistry

CHM 6272: Carbohydrates and Nucleic Acids

**4 ANALYTICAL CHEMISTRY COURSES**

**A First Semester Compulsory Courses**

- i. CHM 6411 Advanced Thermodynamics
- ii. CHM 6521: Food, Water, drugs and Pharmaceutical Analysis
- iii. CHM 6531: Separation Methods
- iv. CHM 6551: Thermal and Photochemical Analysis

**One (1) Elective Course:**

**B Second Semester Compulsory Courses**

- i. CHM 6462: Applied Spectroscopy

- ii. CHM 6552: Research Methodology, Data Handling and Treatment
- iii. CHM 6582: Automation in Analysis

**Two (2) Elective Courses:**

**Elective Courses:**

CHM 6541: Classical Methods

CHM 6572: Radiochemical Methods

CHM 6562: Electroanalytical Methods

**COURSE CONTENTS AND DESCRIPTIONS**

**CHM 6211: Advanced Organic Chemistry**

This course deals with physical concepts as applied to organic chemistry; organic reaction mechanism; substituent effects and linear free-energy relationship and basic mechanistic concepts such as kinetic versus thermodynamic control, Hammond's postulate, and the Curtin-Hammett principles.

**CHM 6222: Organic Reaction Mechanism**

Carbocation, Carbanion, free radicals (Nitrogen's, carbene, arynes) Electronic and steric effects; Strengths of acids and bases: Electrophiles and nucleophiles: Nucleophilic substitution: Thermodynamics of reactions: Reaction kinetics; And addition reaction: Hydrolysis Molecular rearrangement pericyclic reactions: Acid-base catalysis: Hydrolysis of esters: Acetyl and glycol-Sides Enzyme catalysis: Tetrahedral intermediates: Linear free energy relationship: Kinetic and non-Kinetic methods of determining reaction mechanisms.

**CHM 6231: Organic Photochemistry**

Energy and electromagnetic reactions: Electronic vibration and rotational energy of molecules: Molecular Orbital's: Adsorption Spectroscopy selection rules: Frank.

**CHM 6241: Natural Products**

General methods of isolation and structural determination of terpenes, steroids, alkaloids, fats and prostaglandins ; Biosynthesis and elucidation of biosynthetic pathways of the above natural products; Medicinal and industrial uses of natural products.

**CHM 6252: Organic Synthesis**

Synthesis in which heterocycles are “preformed”: Pyrrolidine, pyrrole and indolizidine alkaloids; products; pyridine quinolizidine, alkaloids: complex indole alkaloids; Benzylisoquinoline alkaloids but not involving Pictet-Spengler or Bischler – Napierald reaction Synthesis in which heterocycle ring formation is key step; Benzylisoquinoline alkaloids: Normal and rearranged skeletal types: Camptan anti tumour agent: Aflatoxins, (Benzodiazepines) ; use of heterocycles for activation and masking of functionality. Use of Dihydro-1,3-oxazines (zeatin): use of 1, 3-dithiane (Juvenile Hormones). Use of Isoxazoles (Corrin synthesis): use of Furans and Thiophenes.

### **CHM 6262 Heterocyclic Chemistry**

Structure, reactivity and synthesis of the following heterocyclic and their derivatives: furan, pyrrole, thiophene, pyrazole, imidazole, benzopyrrole, benzofuran and benzothiophene rings systems involving purines, pteridium, quinolines, Isoquinolines and benzopyrans: Heterocyclic compounds of pharmaceutical interest, e.g penicillin and cephalosporins; Antibacterial, anticonvulsive: antipyretic and anti-rheumatic agents: Hypnotic agents; Barbiturates; Antihistamines: stimulants, opium and tobacco alkaloids.

### **CHM 6272 Carbohydrates and Nucleic Acids**

Monosaccharides and disaccharides, Structure, reaction and synthesis Deoxysugars, oxosugar, amino-sugars, sugar epoxides and antibiotics having these sugar molecules; Polysaccharides, Starch and cellulose; Structure and uses ; Structure and synthesis of nucleosides and oligonucleotides, Sequencing of nucleic acids; Biosynthesis of nucleic acids; Proteins coding sequence. Genes and molecular biology: Genetic engineering.

### **CHM. 6311 Coordination Chemistry**

d-orbitals involvement in complex formation: Stability of coordination compounds; Bonding theories; BT (Valence Bond Theory). CFT (Crystal field theory) and MOT (Molecular Orbital theory): Complex and Structural preferences: Magnetic properties of complexes: Stereo-chemical arrangements for complexes having coordination number up to 9: Constitutional isomerism and stereo-isomerism.

### **CHM 6321: Organometallic Compounds**

Synthesis: Bonding and structure of organometallic compounds: Carbons-donors: Metal carboxyls and related compounds: Compounds with cyclic x-donors: Association, Substitution: addition, elimination and rearrangement reactions in organo metallic-compounds: Catalysis involving organ –metallic compounds.

### **CHM 6332: Inorganic Reaction Mechanism**

Mechanism of electron transfer reactions and synthesis of coordination compounds; Substitution reactions for octahedral and square – planar coordination compounds: Molecular rearrangements. Photo-chemical reactions with special emphasis on metal complexes: Reactions at groups attached to central atom through co-ionic .Synthesis of coordination ligands and selected methods Macrocylic legends’

### **CHM 6341: Bio-Inorganic Chemistry**

Enzymes: Nitrogen fixation: Essential traces elements in biological systems; Metal chelates and their importance in biology: Oxygen carries and transfer of phosphate in biological systems: Electron transfer agents; Iron-sulphates in biological systems: Electron transfer agents: Iron-Sulphur protein: Recent studies in bio-inorganic chemistry; Chelating agents and thio-semicarbazone.

### **CHM 6352 Nuclear Chemistry**

Basic properties of nuclei: Nuclear constituents: Stable nucleus: Nuclear building energies: Nuclear size: Saturation of nuclear forces: Electrical and magnetic properties of the nuclei: The two nuclei system: The square well potential Neutron-proton scattering: The liquid drop and shell models for the structure of the nuclei: Radio-active decay and nuclear reaction: Applicability of 1<sup>st</sup> order law to radio-decay reactions: Elementary nuclear, particles and their interactions; Invariance principles and conservation laws.

### **CHM 6361 Non-Aqueous Solvents**

Acid-base systems and neutralization reactions in non-aqueous media; Metal solutions in liquid ammonia and their magnetic properties: Reaction mechanisms: Non-aqueous systems like anhydrous H<sub>2</sub> SO<sub>4</sub>, SO<sub>2</sub> interhalogens, halogens and halo acids, HNO<sub>3</sub> and reactions in these: Applications of non-aqueous chemistry.

### **CHM 6372 Bonding in Non-Transition Elements**

General introduction to bonding in inorganic compounds: Bond angles about atoms with trans-octahedral structures: Multiple bonding: Binary compounds and oxo-anions and elements below Si structure: and energetic of ionic solids: etc.

### **CHM 6382 Molecular Polyhedral**

Neutral borohydrides, (BH)<sub>n</sub> compounds; the close polyhedral hydroborate ion and carboranes: Metallocarboranes; Metal-metal bonds and metal clusters; Poly-atomic clusters.

### **CHM 6411 Advanced Thermodynamics**

Equation of state for real gases; chemical equilibrium; thermal conductivity of a gas; viscosity of a gas; Physical transformations of simple mixtures; basic Laws of thermodynamics; thermodynamics of mixing; chemical kinetics; reaction order and molecularity of reaction; the Arrhenius equation; the mechanism of a reaction; catalysis.

### **CHM 6441: Advanced Chemical Kinetics**

Mechanism and rates of elementary processes in the gas-phase and in solution. Experimental techniques in the investigation of free-radical reactions: Reactions at interfaces and fast reactions: Heterogeneous catalysis and surface reactions: Theories of chemical reaction rates based on equilibrium hypothesis: Molecular dynamics and other theories of reaction rates neglecting the equilibrium hypothesis: Energy transfer processes including detailed treatment of theoretical models: survey of experimental results and other topics of current interest.

### **CHM 6421: Advanced Theoretical Chemistry**

Semi-empirical molecular orbital calculations: Quantum electro-dynamics: Theory of molecular crystal: Interaction of radiation with matter: x-rays and crystal structures: Solid state.

### **CHM 6431: Advanced Electrochemistry**

Advanced electrochemical processes: Electrochemical kinetics: Photochemistry: Radiation chemistry and the chemistry of excited Species: Physical chemistry of macromolecule polymer: properties and molecular mass determination: Chemical modification of polymers.



### **CHM 6442: Colloids and Surface Chemistry**

Dispersion system: Aerosols, Lysol (Lyophilise and hypnotic Sols): Optical and electrical properties of sols: Emulsions: Surface chemistry (absorption): Inorganic and Organic macromolecules: Thermoplastic thermo sets and their mechanical properties: Naturally occurring polymers and biological systems; Catalytic polymerization and configuration: practical importance of colloids.

### **CHM 6452: Quantum Chemistry**

Mathematical techniques; fundamentals of quantum mechanics; molecular orbital methods; valence bond methods; group theory and its applications to chemical problems; quantum theory of angular momentum theory and its applications to chemical problems; quantum theory of angular momentum; advanced molecular quantum mechanics; the harmonic transformation; the Klein –Gordon equation; the Dirac equation.

### **CHM 6462: Applied Spectroscopy**

The emphasis is based on theoretical principles and practical applications of analytical methods to the study of chemical systems. The course outline includes electrogravimetry and Coulometry; the Faraday's laws; Coulometric Titration; complexometric titration. Metal ion indicators. Absorption Spectroscopy: IR, UV-Visible, NMR spectroscopy, Atomic absorption Spectroscopy, Separation techniques, GC, GSC. LLG, IEL, Gel Chromatography, HPLC. Paper and thin layer chromatography; mass spectrometry, X-ray.

### **CHM 6521: Food, Water, Drugs and Pharmaceutical Analysis**

Food analysis; Preservatives and additives; Food and drugs s Act: Determination of drugs by chromatography and spectroscopic methods; Pharmaceutical analysis: Pharmacopeia: Health and safety. Good laboratory practice

### **CHM 6531: Separation Methods**

General introduction to separation methods: distillation, solvent extraction, chromatography (Paper, T.L.C & column). Electrophoresis, ion exchange, liquid ion exchange, gel filtration chromatography, ring oven technique.

### **CHM 6541 Classical Methods of Analysis**

General introduction to qualitative and quantitative methods of analysis: Scope and limitations of qualitative analysis; titrimetric analysis: Acid-base titrations in aqueous solutions: Acid-base strengths and proteolysis curves in water: Theory of indicators; Acid-

base equilibrium; indicators and titrations in non –aqueous solvents; Complication titration and theory of metal chrome indicators: Oxidation –reduction equilibrium and titration curves: The theory of oxidation-reduction indicators: Equilibrate in precipitation reactions and the theory of absorption indicators: Gravimetric analysis: Precipitates and their formation; separation; purification and their conversion to a weighing form: common organic precipitants.

#### **CHM 6551: Thermal and Photochemical Analysis**

Bend theory; solids and defect introduced upon irradiation of solids; Specific defect structures in stoichiometric crystalline solids: Role of defects in photo-and-thermal decomposition of solids; Thermochemistry; thermogravmetric analysis; differential thermal analysis; thermometric titrations

#### **CHM 6552: Research Methodology; Data Handling and Treatment**

Treatment of analytical data: Nature of errors: Quality control charts; statistical inference based on significant tests and confidence limits; analysis of variance: Linear relationship between two variables: sampling and specifications.

#### **CHM 6562 Electroanalytical Methods**

General introduction of Electroanalytical methods: Potentiometry and potentiometric titrations; voltametry; Polalography; Amperometry: Coulometry: Chromopotentiometry: Stripping analysis.

#### **CHM 6572: Radiochemical Methods**

Nuclear processes: Radioactive decay and elementary particles : Production of radionuclides; Naturally occurring radioactive elements: Absorption of nuclear radiation and effects on matter : Radiation detection and measurement : Statistics of counting ; Analytical application of radio-isotopes ; Hazards , laboratory designs organization-purity : storage and stability of labeled compounds .

#### **CHM 6582 Automation in Analysis**

Automation in electrochemical methods of analysis: polarography amperometry, coulometry etc. Automated counting in radiometric and X-ray methods of analysis, Automatic analytical chromatography including gas; thin layer and ion exchange; Application of computers in analytical chemistry

## **ii. Postgraduate Diploma (PGD) in Chemistry**

### **PHILOSOPHY**

The Postgraduate programme of the Department of Pure and Applied Chemistry is designed to produce well equipped chemists for various research centres, industries and other establishments within and outside Nigeria. The programme will also prepare graduates for career in the Universities, Polytechnics, Colleges of Education and other institutions of higher learning. The courses are therefore designed to give a balanced overview of the discipline at Master's (M.Sc.) level. It is hoped that the programme will enable the students on graduation to have the knowledge and acquire the skills which will equip them to take full responsibilities of management in industrial establishment, research and academic institutions.

### **OBJECTIVES**

To actualize the vision, the Department shall lay emphasis on academic and research-oriented programmes that will lead to personal and project development such as:

- (i) Training the students in advanced contemporary methods that will equip them to carry out researches in their areas of specialization.
- (ii) Equipping the students with skills that will enable them identify, analyze and control wastes in the environment.
- (iii) Modifying locally available raw materials and wastes into industrial input.
- (iv) Synthesizing and/or formulating new industrial and commercial products using locally available feedstock.

- (v) Utilizing available natural resources/solid minerals to manufacture materials needed for the upkeep of man.
- (vi) Providing well-equipped chemists required at the universities and other institutions of higher learning and
- (vii) Meeting the manpower needs of non-academic institutions; for this purpose a post-graduate diploma programme in applied chemistry is also available.

### **ADMISSION REQUIREMENT**

Admission into PGD programme is open to candidates with B.Sc. degree from the Veritas University or any other recognized university within and outside Nigeria, recognized and approved by the senate of the Veritas University. Such prospective students must have had five credit passes including Chemistry, Physics, English language and Mathematics at the School Certificate level and who also score a minimum of 3.0 CGPA in his / her first degree.

### **GRADUATION REQUIREMENT**

Students must register and pass all stipulated and relevant courses. Each student's performance shall be based on:

- (a) Continuous assessment and final examination in the taught courses
- (b) Assessment of seminars
- (c) Assessment of Project

Minimum No. of years for graduation: One (1)

### **LIST OF EXISTING ACADEMIC STAFF FOR THE PROGRAMME**

<b>NAME OF ACADEMIC STAFF</b>	<b>AREA OF SPECIALIZATION</b>	<b>DISCIPLINE</b>	<b>QUALIFICATION</b>	<b>RANK</b>
Ogbonnaya Ofor	Surface Chemistry	Chemistry	B.Sc., M.Sc.,	Professor

Chukwunoye M. Ojinnaka	Organic Chemistry (Natural Product)	Chemistry	Ph.D B.Sc. Ph.D	Professor
Casmir E. Gimba	Polymer Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Professor Senior Lecturer
Innocent C. Nnorum	Analytical/Environmental Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Lecturer II
Stephen E. Abechi	Physical Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Lecturer II
Friday G. Okibe	Analytical Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Lecturer II
Ini P. Ekpe	Biochemistry (Clinical)	Biochemist ry	B.Sc., M.Sc., Ph.D	Assistant Lecturer
Victor E. Ebiekpe	Physical Chemistry	Chemistry	B.Sc., M.Sc., Ph.D	Lecturer
Uchechukwu A. Ogwuda	Organic Chemistry	Chemistry	B.Sc., M.Sc. B.Sc., M.Sc. B.Sc., M.Sc.	Tutorial Assistant

## COURSE CONTENTS AND COURSE DESCRIPTIONS

Students admitted into the programme must register and pass the following courses:

### 1<sup>st</sup> Semester

Course Code	Course Title	Unit
PGDC 5411	Physical Chemistry	3
PGDC 5311	Inorganic Chemistry	3
PGDC 5211	Organic Chemistry	3

PGDC 5001	Seminar	2
	<b>Total</b>	<b>11</b>

## 2<sup>nd</sup> Semester

Course Code	Course Title	Unit
PGDC 5112	Analytical Chemistry	3
PGDC 5002	Seminar	3
Any other two courses from The chemistry electives		6
	<b>Total</b>	<b>12</b>

### Elective Courses for Second Semester

S/N	Course Code	Course Title	Unit
1.	PGDC 5422	Electrochemistry	3
2.	PGDC 5322	Mineral Processing and Metallurgy	3
3.	PGDC 5222	Organic Synthesis	3
4.	PGDC 5722	Polymer Chemistry	3
5.	PGDC 5812	Petroleum Chemistry	3
6.	PGDC 5332	Environmental Chemistry	3
7.	PGDC 5232	Natural Products Chemistry	3

### COURSE CONTENTS AND DESCRIPTIONS

#### PGDC 5112 Analytical Chemistry

Types of Analysis. Steps in an Analytical Process. Statistical evaluation of analytical result. Electrogravimetry and Coulometry: the Faraday's laws. Electrogravimetry. Conditions for good Electrogravimetry. Polarization effects. Controlled current/Controlled potential coulometry. Coulometric Titration. Electrolytic Tripping. Applications. Voltametry: dropping mercury

electrode. Polarographic currents. Stripping Voltametry. Anodic Stripping Analysis. Chronopotentiometry. Amperometry. Amperometric titration. Applications. Complexometric classification of ligands. Masking and demasking. Complexometric titration. Metal ion indicators. Applications. Adsorption Spectroscopy: IR Adsorption and molecular structure, quantitative application. UV-Visible absorption, photometric titration, quantitative application. Atomic absorption Spectroscopy, emission and absorption in flames, atomization and ionization, quantitative analysis. Separation techniques: thermodynamics of partition between two phases. Thermodynamics of separation: batch and continuous extraction. Solvent extraction, chelate extraction, masking and pH effect, extraction effects. Chromatographic method: GC, GSC. LLG, IEL, Gel Chromatography, HPLC. Paper and thin layer chromatography. Quantitative applications. NMR spectroscopy:

Principle. Proton NMR spectra and molecular structure elucidation, quantitative analysis. NMR spectrometer, mass spectrometry column, principle, resolution, use of stable isotopes, the mass spectrum, analysis of mixtures, analytical applications, thermal Analysis: principle, types, instrumentation and analytical applications X-ray methods: production of X-ray and X-ray Spectra, x-ray method, direct absorption, emission fluorescence and diffraction, electron microprobe analysis. Radiochemistry: Nuclear reactions and radiations, measurement of radioactivity, applications of radio nuclides, analytical applications.

### **PGDC 5411 Physical Chemistry**

Equation of state for real gases: Van Der Waal's equation, Redlich-Kwong Equation, Virial equation of state. Physical equilibrium: the relation between fugacity coefficients; Calculating fugacity; estimating fugacity of a gas. Chemical equilibrium: properties of reaction; perfect gas equilibrium; Effects of Temperature on equilibrium constant. The kinetic molecular theory of gases: the most probable speed, the mean speed, and Root-mean-square speed of gases; diffusion of a gas; thermal conductivity of a gas; viscosity of gas physical transformations of simple mixtures: partial column, molar quantities; thermodynamics of mixing; ideal solution; colligative properties; chemical kinetics; Rate laws and rate equations; reaction order and molecularity of reaction determination of order and rate constant; the Arrhenius equation; the mechanism of a reaction; catalysis; basic laws of thermodynamics.

### **PGDC 5422 Electrochemistry**

*Introduction:* Faraday's laws of Electrolysis. Electrochemical series. Ionic activities, mean activity coefficient. The Debye-Huckel Limiting law. Electrochemical cells. The Nernst equation. Application of reduction potentials. Equilibrium constant. Solubility product constant. The measurement of PH and pKa. Thermodynamic functions from EMF data. Conductivity of electrolyte solutions: Specific conductivity and molar ions. Kohlrausch Equation. Ionic mobilities, transport numbers.

### **PGDC 5311 Inorganic Chemistry**

Characteristics of transition metals, theories of bonding (valence bond theory, cristafeld theory, molecular-Orbital theory). Carbonyl. The chemistry of the transition metal groups. (Sc. Ti. Cr. Mn. Fe. Co. Ni. Zn groups). General chemistry of the lanthanides a-d Actinides. Co-ordination chemistry.

### **PGDC 5322 Mineral Processing and Metallurgy**

Ore Dressing/ Mineral Processing (combination processing crushing and grinding) Classification processes. Separation or concentration processes, agglomeration techniques. Extraction processes: roasting of metal oxides. Smelting matte converting. Reduction of metal oxides,, fire refining. Extraction of ion blast furnace (BF) and direct reduction (DR) methods extraction of Cu, Pb, Zn, Al, Mg, steel making. Metal melting. Types of melting furnaces, casting methods and casting defects. Metal working techniques rolling, forging extrusion, wire drawing, etc.

### **PGDC 5211 Organic Chemistry.**

Reactants and Reactions: types of reactants, types of reactions, SN', SN2, E1 and E2. Reaction mechanisms, product studies, kinetic and non-kinetic methods. Structure and reactivity. Electronic and field effects: interpretation of physical properties of organic molecules using inductive mesomeric and hyperconjugative effect. The Hametts equation: stereochemical principles in organic reaction, confirmation of organic molecules. Chemistry of di- and poly functional compounds: general survey of di – and polyfunctional compounds. General reaction of sugar and amino compounds.



### **PGDC 5232 Natural Product Chemistry**

*Fundamental concepts* and equations in heat, mass and momentum processes. Mass transfer with and chemical reaction. Single and multiple isothermal Chemical reactors. Non-Isothermal Chemical reactors. Selected topics in heat conduction and in mass and modal concentration diffusion processes. Ideal state and non-ideal state separation techniques in chemical process operations. Ideal (or equilibrium) – Stage calculation of trayed and packed columns (or towers). Studies of process techniques for separating mixtures of chemical species in the petroleum/petrochemical, natural gas liquid and chemical industries. Real (or non-ideal) – Stage approach of preparation techniques, Non-equilibrium stage approach to the determination of the performance of distillation columns, hydrocarbons absorbers, trayed and packed absorbers and strippers for the removal of acidic components like CO<sub>2</sub>, H<sub>2</sub>S and CO from gas streams.

### **PGDC 5722 Polymer Chemistry/Technology**

Basic concepts: Polymer structural unit, macromolecule, resin, monomer, etc. Different types of polymers. Sources of monomers. Monomer functionality. Polymer utilization. Thermoplasticity and Thermosetting resins. Polymerisation. Addition and Condensation Simple treatment. Polymerisation conditions-Bulk. Solution. Suspension and Emulsion Techniques (Introductory principles). Crystallinity in polymers. Characterization of polymer molecular weight. Polymer solubility and solutions. Transitions in polymers.

### **PGDC 5812 Petroleum Chemistry**

Introduction: Brief Chronological history of oil and gas. Origin of petroleum Nature of Oil and Gas: Definition of crude oil. Classification of crude oil. Gaseous petroleum (Natural gas). Composition of natural gas. Chemicals used for oil production and chemistry of oil drilling. Environmental implication of oil and gas production. Oil Refinery Processes. Separation Processes. Separation processes. Crude oil distillation. Review of Basic hydrocarbon reactions. Carbonation reaction. Free radical reactions. Conversion processes. Catalytic reforming. Catalytic isomerisation. Catalytic. Isomerization. Hydrocracking. Dehydrosulphurization. Lubricating oils chemistry technology. Basic tests for petroleum products and quality control.

### **PGDC 5332 Environmental Chemistry**

The objective of this course is to introduce students to chemistry of the environment and environmental pollution control methods in various industries.

*The Earth's Crust:* Rocks and Minerals, soils, role of water. Weathering Processes; Mechanisms and control, ion-exchange. Land-based hydrosphere: atmospheric precipitation, evaporation, crystallization. Formation of petroleum. Formation of coal. *Environmental Chemistry of Rivers, Lakes, Water and Sediment:* Economic significance. Nature of the freshwater environment. Pollution of the aquatic environment. Formation of mineral resources in sediments. Hydrocarbons in the marine environment biosynthesis, geochemical processes and anthropogenic inputs, distribution of hydrocarbon and fate of hydrocarbon in the marine environment. *Thermal Pollutants:* Effects. Use of waste heat Radiation and its effects on life. Industrial and Domestic Pollution: Sources. Effects. Control and abatement. Characterization of industrial wastewater from selected industries. Environmental safety and prevention of industrial pollution: types of industrial safety. Safety code and signs as used in Nigeria industrial risk assessment. Health and environment. Prevention of pollution and industrial accidents: How to respond to pollution in selected industries. Information. Mobilization of resources. Containment. Cleanup. Remediation and restoration. Environment Impact of petroleum Refineries and petrochemical plants: Fertilizer industries. Textile industries. Pulp and paper industries. Iron and steel industries. Foundries industries. Chemical industries. Food and Beverages factories. Breweries and soft Drinks Factories, etc. environmental Economics. Economics of Pollution. Environmental Legislation.

### **PGDC 5222 Organic Synthesis**

*Synthetic Design:* Planning Synthesis, Disconnection and Connection. Carbon-Carbon Single bonds (C-C). Carbon-Carbon double bonds C=C. Carbon-Carbon triple bonds C≡C. Functional group interconversion. Transformation of organic molecules. Oxidation. Reduction. Application of Infrared spectroscopy, Mass Spectrum, Ultraviolet, and nuclear magnetic resonance spectroscopy in synthesis.

## **3.2 DEPARTMENT OF APPLIED PHYSICS**

### **i. M.Sc. in Applied Physics**

**Electronics/Communications**

**Geophysics**

**Radiation/Health Physics**

### **PHILOSOPHY**

The philosophy of the M.Sc programme is to train and develop scholars who are self-motivated with independent minds and intellectual competence, whose judgments are based upon respect for evidence, ideas, and a deep concern for values, both private and public. In particular, our mission is to develop in the main and applied research in the alternative energy sector, an area currently of concern all over the world. Environmental friendly utilization of energy is a major objective in the development of our manufacturing as well as transportation and communication industries. Notwithstanding, our zeal and efforts contribute to broadening of the frontiers of knowledge in other areas of specialization incorporated in this program. The programme will also prepare graduates for career in the Universities, Polytechnics, Colleges of Education and other institutions of higher learning. The courses are therefore designed to give a balanced overview of the discipline at Post-graduate level. It is hoped that the programme will enable the students on graduation to have the knowledge and acquire the skills which will equip them to take full responsibilities of management in industrial establishment, research and academic institutions.

### **AIMS/OBJECTIVES**

By exposing students to advanced knowledge in Physics, the programme aims at:

- (i) advancing scientific knowledge in various special areas of Theoretical and Experimental Physics;
- (ii) preparing graduate students for teaching and research positions in our Tertiary Institutions and, specialized positions in our various industrial establishments and government agencies;
- (iii) generating direct technological development support, reflecting our national advancement aspiration, goals and objectives;
- (iv) producing scholars who would utilize their knowledge of Electronics/Communications, for human, national, African and global development;
- (v) producing graduates who apply their knowledge for the advancement of humanity;
- (vi) highlighting awareness especially through equipping and motivating them for a full and balanced development of their personality and the need for replication and the refinement of same;

#### **RATIONALE/JUSTIFICATION**

- i. The M.Sc. programme aligns with the mission and philosophy of the University which is to provide “the highest standards of teaching, research and community service whilst providing a balanced education for the acquisition of knowledge, practical skills and moral rectitude.”
- ii. The programme aims to meet the demands for higher human resource development to meet national needs using language as the memory of a peoples’ cultures and literature as the mirror for the society.

#### **LIST OF EXISTING ACADEMIC STAFF FOR THE PROGRAMME**

<b>S/No.</b>	<b>NAME OF STAFF/Designation</b>	<b>Qualifications/Year Obtained</b>	<b>Area of Specialization</b>
<b>1.</b>	<b>Dr. Margaret A. Briggs-Kamara Associate Professor</b>	<b>B.Sc.: 1982 PGDE: 1987 M.Phil.: 1991</b>	<b>Applied Nuclear Physics</b>

		<b>Ph.D: 2002</b>	
<b>2.</b>	<b>Dr. (Mrs) Maria-Assumpta O. Eduok-Akpan</b>	<b>NCE: 1973</b> <b>B.Sc.: 1978</b> <b>M.Sc.: 1987</b> <b>M.Eng.: 1994</b> <b>Ph.D: 2007</b>	<b>Industrial Engineering Operations. Research</b>
<b>3.</b>	<b>Dr. Godfrey T. Akpabio</b> <b>Associate Professor</b>	<b>B.Sc.: 1981</b> <b>M.Sc.: 1987</b> <b>Ph.D: 2001</b>	<b>Applied Geophysics</b>
<b>4.</b>	<b>Dr. Louis E. Akpabio</b> <b>Associate Professor</b>	<b>B.Sc.: 1983</b> <b>M.Sc.: 1989</b> <b>Ph.D: 2008</b>	<b>Theoretical Plasma Physics</b>
<b>5.</b>	<b>Dr. Aniesua A. Essiett</b> <b>Senior Lecturer</b>	<b>B.Sc.: 1987</b> <b>M.Sc.: 1993</b> <b>Ph.D: 2006</b>	<b>Nuclear and Radiation Physics</b>
<b>6.</b>	<b>Mr. Chibuzo Emeruwa</b> <b>Assistant Lecturer</b>	<b>SSCE: 2004</b> <b>B.Sc.: 2008</b> <b>M.Sc.: 2012</b> <b>Ph.D.: In View</b>	<b>Engineering Physics/Electronics</b>
<b>7.</b>	<b>Mr. Uchechukwu A. Opara</b> <b>Assistant Lecturer</b>	<b>SSCE: 2000</b> <b>B.Sc.: 2005</b> <b>M.Sc.: 2011</b>	<b>Pure &amp; Applied Mathematics</b>
<b>8.</b>	<b>Mr. Raymond C. Abenga</b> <b>Graduate Assistant</b>	<b>SSCE: 2003</b> <b>B.Sc.: 2008</b> <b>M.Sc.: 2014</b>	<b>Theoretical Physics</b>
<b>9.</b>	<b>Patrick Nkemakonam Dikedi</b> <b>Assistant Lecturer</b>	<b>M.Sc</b>	<b>Physics/Applied Geophysics</b>
<b>10.</b>	<b>Paul Uroko Asogwa</b> <b>Senior Lecturer</b>	<b>B.Sc.: 1986</b> <b>M.Sc.: 1990</b> <b>Ph.D.: 2000</b>	<b>Solar Energy/ Material Science</b>
<b>11.</b>	<b>Ernest Benjamin I. Ugwu</b>	<b>B.Sc.: 1988</b>	<b>Atmospheric Physics</b>

	<b>Lecturer I</b>	<b>M.Sc.: 2004</b> <b>Ph.D.: 2013</b>	
<b>12.</b>	<b>Ayantunji Benjamin Gbenro</b> <b>Senior Lecturer</b>	<b>Ph.D</b>	<b>Communication</b> <b>Physics</b>
<b>13.</b>	<b>Patrick Ovie Akusu</b> <b>Senior Lecturer</b>	<b>B.Sc.: 1985</b> <b>M.Sc.: 1992</b> <b>Ph.D.: 2002</b>	<b>Radiation &amp; Nuclear</b> <b>Physics</b>

## **DETAILED COURSE STRUCTURE OF PGD PROGRAMME IN APPLIED PHYSICS**

### **A. CORE/COMPULSORY COURSES**

FIRST SEMESTER:

Course Code	Course Title	Credit Hour
PHY 6111	Mathematical and Numerical Methods	3
PHY 6121	Electromagnetic Theory	3
PHY 6131	Quantum Mechanics I	3
SCI 6111	ICT and Research Methodology	3
PHY 6141	Seminar	3

THIRD AND FOURTH SEMESTER:

PHY 6002	Research Project	6
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### **B. SPECIALISED COURSES: (AT LEAST 5 COURSES IN EACH CASE)**

#### **(I). ELECTRONICS/COMMUNICATIONS**

FIRST SEMESTER (ANY 2 OF THE COURSES)

Course code	Course Title	Credit Hour
PHY 6211	Solid State Electronics	3
PHY 6221	Network System and Analysis	3
PHY 6231	Electronics & Instrumentation	3

SECOND SEMESTER (ANY 3 OF THE COURSES)

Course code	Course Title	Credit Hour
PHY 6212	Digital and Analogue Techniques	3
PHY 6222	Digital Signal Processing	3
PHY 6232	Switching Circuits and Logic Designs	3
PHY 6242	Communication Systems	3

## **(II). GEOPHYSICS**

### **FIRST SEMESTER**

Course code	Course Title	Credit Hour
PHY 6311	Elements of Geology	3
PHY 6321	General Geophysics	3

### **SECOND SEMESTER (ANY 3 OF THE COURSES)**

Course code	Course Title	Credit Hour
PHY 6312	Radiometric and Well Log	3
PHY 6322	Electrical and Electromagnetic Methods	3
PHY 6332	Gravity Prospecting and Magnetics	3
PHY 6342	Seismic Exploration	3
PHY 6352	Geothermics	3

## **(III). RADIATION/HEALTH PHYSICS**

### **FIRST SEMESTER:**

Course code	Course Title	Credit Hour
PHY 6411	Radiation Physics	3
PHY 6521	Nuclear Theory	3

### **SECOND SEMESTER (ANY 3 OF THE COURSES)**

Course code	Course title	Credit Hour
PHY 6412	Radiation Detection and Measurement	3

PHY 6422	Radiation Detection and Dosimetry	3
PHY 6542	Reactor Physics	3
PHY 6432	Advanced Radiation Physics	3

**COURSE DESCRIPTION:**

(i). **PHY 6002: RESEARCH PROJECT (6 Credit Units)**

An original research will be carried out in a topic chosen from the candidate's area of specialization under the Supervision of the Academic staff in the particular research group offering the area of specialization. A written thesis will be prepared and submitted. This will be the topic for his/her two Seminars.

(ii). **PHY 6111: MATHEMATICAL AND NUMERICAL METHODS (3 Credit Units)**

Linear differential equation and applications to vibratory motion of mechanical systems and electronic circuit problems. Solution of differential equation by the Laplace transformation the gamma function. Heaviside and inverse Laplace transform. Partial differential equations and boundary value problems. Fourier series and integrals. Numerical methods determinants, matrices and linear simultaneous equations of Chios and Crammer's rules. Method of least squares, curve fitting and regression analysis. Approximation and errors. Interpolation and extrapolation

(iii). **PHY 6121: ELECTROMAGNETIC THEORY(3 Credit Units)**

Energy consideration in electrostatic field and electrostatic fields in vacuum and material media. Boundary value problem. Maxwell's equation, have equation, plane waves and Maxwell's stress tensor. Polarization cases. Electromagnetic stress tensor and electromagnetic mass and momentum.

(iv). **PHY 6131: QUANTUM MECHANICS I (3 Credit Units)**

Schrödinger equation and the wave function. The general laws of motion. The stationary state resonant cavity, particles in an infinite deep potential and particle in a potential well, harmonic oscillator, potential barriers and angular momentum. Time independent and time dependent perturbation. Transmission line model, electric dipole, harmonic perturbation. Overview of the Quantum Theory energy and momentum of Light quanta, black body radiation, de Broglie waves.. Representation of mechanical quantities through operators, Eigen-values and Eigen-functions. Time dependent States and mechanical quantities. Relationship between Quantum



mechanics. Classical mechanics and optics - time dependent Schrödinger equation and the classical Hamilton-Jacobi equation. Motion of particles in a conservative force field. Elements of perturbation theory. Emission, absorption and scattering of light in atomic systems. Particles in a potential well. Many-body problems. Second quantization.

(v). **SCI 6111: ICT AND RESEARCH METHODOLOGY (2 Credit Units)** (COLLEGE COURSE)

(vi). **PHY 6141: SEMINAR (3 Credit Units)**

The students will present three (3) Seminars. The idea is to expose and develop the students in the art of seminar presentation. Choice of topics will be related to their Research Project.

(vii). **PHY 6211: SOLID STATE ELECTRONICS (3 Credit Units)**

Review of semi-conductor Theory and Energy Bands. Depletion Region: Abrupt and Linearly graded junctions, depletion layer width, contact potential and depletion layer capacitance. Junction Breakdown: Thermal instability, Tunneling effect, Avalanche multiplication, etc. Varactor Diode, Schottky Diode and Barriers, Photodiodes and Optoelectronic Devices. Interface and Thin-Film Devices: Metal-semiconductor devices, metal insulators effect semiconductor (Diodes), IGFET and related surface effects, Thin-Film devices. Crystal Growing and Device Fabrication.

(viii). **PHY 6221: NETWORK SYNTHESIS AND ANALYSIS (3 Credit Units)**

Study of modern techniques used in the synthesis of linear networks. Analysis of electric circuit concept development and initial conditions in network mechanization. Positive real functions; driving point synthesis, two-port synthesis and approximation techniques of Butterworth and Chebyshev filters. Active network synthesis and analysis. Impedance function and network. Theorems transforms of signal waveforms. Sinusoidal steady-state analysis and network functions poles and zeros.

(ix). **PHY 6231: ELECTRONICS AND INSTRUMENTATION (3 Credit Units)**

Types of Instruments: analogue, digital: comparison, specifications, analysis, selection, Classes of instruments: active, passive; mechanical, electrical, acoustical. Transducers: classifications, analogue, digital, self-generating semi-conductor, acoustic. Instrumentation measuring techniques, operating torques derivation and application. Circuits and networks oscillators, wave-shapers, filters, amplifiers (operational and turned), integrated circuits, application.

Microprocessor fabrication, Block diagram, application; Signal characteristics, analysis and techniques, response to systems.

(x). **PHY 6212 DIGITAL AND ANALOGUE TECHNIQUES (3 Credit Units)**

Analog and digital measurements voltage regulators, phase locked loop, analog instruments, noise, signal, digital instruments. A-D and D-A conversion, digital processors. Operational amplifier circuit and principles of feedback. Analog computers and simulation.

(xi). **PHY 6222: DIGITAL SIGNAL PROCESSING (3 Credit Units)**

Communication and information systems Analog and digital sources and signals transmission parameters, Signal processing fundamentals. Digital coding of analog waveforms. Speech and audio, image and video signal processing. Digital modulation techniques and networking principles.

(xii). **PHY 6232: SWITCHING CIRCUITS & LOGIC DESIGN (3 Credit Units)**

Study of Boolean algebra: design of switching circuits. Minimization of combinational and sequential networks. Systems design and error-correcting codes: pulse generators and wave shaping circuits. Gates and flip-flops; MSI and LSI technology.

(xiii). **PHY 6242: COMMUNICATION SYSTEMS I (3 Credit Units)**

Classical study of telephone, television and telegraph as typical modern systems. Requirements, merits and demerits, signals, information transmission techniques and theorems. Channel capacity, sampling theorem, Fourier theorems, series and signal spectra. Linear systems and response, power and energy densities. Modulation, amplitude-types and techniques. Convolution, bandwidth. Pulse duration and time rise. Demodulation and noise.

(xiv). **PHY 6311: ELEMENTS OF GEOLOGY(3 Credit Units)**

The composition of the earth-mineral and rock classification. Composition and properties of igneous, metamorphic and sedimentary rocks outline geology of Nigeria. Geologic structures, Principles of Geochronology of Nigeria, Geology of Petroleum: Nature, origin, generation and migration of petroleum. Types of petroleum traps. Introduction to Hydrogeology. Geological maps and interpretation.

(xv). **PHY 6321: GENERAL GEOPHYSICS (3 Credit Units)**

The Earth External and Internal features. Physical properties and structure of the Crust, Mantle and Core. Continent drift, sea floor spreading and plate tectonics. General methods of exploration Geophysics: - Seismic, electrical gravity and magnetic, radio metrics and well-logging.

(xvi). **PHY 6312: RADIOMETRICS AND WELLOGS (3 Credit Units)**

Introduction to Drilling and Wells, General Principles of Well Logging and Formation evaluation. Resistivity, Gamma Ray, Self Potential (SP) , Sonic, Neutron, Density, Induction, Temperature logs and Correlation, Composite logs and interpretation. Reservoir Saturation and Thicknesses. Petro physics (Rock Physics). Principles of Radioactivity. Radioactivity of Rocks. Instrumentation and exploration techniques. Radioactive dating and interpretation.

(xvii). **PHYG 6222: ELECTRICAL AND ELECTRONIC METHODS (3 Credit Units)**

Electrical properties of rocks. Electrical prospecting methods using different electrode configurations. Apparent resistivity. In Vertical Electrical Sounding (VES) and Constant Separation Traversing (CST), techniques. Interpretation and Modeling. Self Potential, induced Polarization; Electromagnetic Methods using both natural and artificial sources.

(xviii). **PHY 6332: GRAVITY AND MAGNETIC PROSPECTING (3 Credit Units)**

Concept of gravity and Newton's Law of Gravitation Earth's gravity field. the geoid and the international gravity formula. Isostasy Field measurements of the Earth's gravity; Gravimeters, Gravity data reduction, Bouguer anomaly and separation of anomalies and interpretation. Basic concepts of magnetism magnetization: induced and remanent. Magnetic origin and elements. Variation in the Earth's Magnetic Field. Magnetometers Ground and Airborne magnetic surveys processing and interpretation. Applications of gravity and magnetic to oil and mineral exploration.

(xix). **PHY 6342: SEISMIC EXPLORATION METHODS (3 Credit Units)**

Fundamentals of wave motion. Seismic wave types and their mode of propagation. Reflection and refraction of plane waves for a homogenous half space. Huygen's law. Snell's Law. Field layout and the geometry of reflection and refraction techniques. 2D and 3D, CDP and Fold

Coverage. Seismic Tomography Seismic Sources, Detectors and Recorders. Processing and Interpretation.

(xx). **PHY 6352: GEOTHERMICS (3 Credit Units)**

Principles of Radioactivity. Radioactivity of rocks. Radioactive dating (Rb Sr and K. Ar. Methods). Detection and measurement of environmental radioactive radiation. Using temperature for exploration: maturation of organic matter, porosity and permeability. Thermal conductivity, using logs to determine thermal conductivity. Thermal gradient. Heat flow and sources of Earth's Heat flow.

(xxi). **PHY 6411: RADIATION PHYSICS (3 Credit Units)**

Radiation diametry. Dosmetric unit. Ionization theory and cavity theory. Natural radiation levels and simple estimation of dose rates from isotropic sources. Chemical and solid state dosemetry: calorimetry integrating dosimeters, semiconductor devices, scintillators, emulsion. Dosimetry of, and neutron fields. Mixed fields and accelerator beams. Personnel dosimetry, hospital, dosimetry, and industrial dosimetry. Activation analysis. Brief survey of activation processes. Technique of irradiation. Materials handling and preparation. Specialized arrangements of NaI (TI) and Ce (Ii) spectrometers. Data handling processing's, peak search, on line computer methods

(xxii). **PHY 6521: NUCLEAR THEORY (3 Credit Units)**

Review of models of nuclear structure. Scattering of particles in potential field. Reaction theory. Scattering. Polarization in Nuclear reaction. Interaction of nuclei with electromagnetic radiation. Interaction with slow neutrons. Optical model at low energies.

(xxiii). **PHY 6412: RADIATION DETECTION AND MEASUREMENT (3 Credit Units)**

Radiation sources: Radioactive Sources: generators; accelerators; reactors. Interaction of radiation with matter. Model detector and its response. Radiation dose and hazards. Gaseous detectors: Counters and rate meters. Scintillation detectors; Main scintillators and their operation: Photomultiplier tubes: radiation spectrum produced by scintillation detectors and interpretation:

detection efficiency and resolution. Semiconductor detectors. Junction and surface barrier detectors. Charged particle spectroscopy Ge(Li) and by hyperpure germanium (HPGe) detectors. Radiation spectroscopy with Ge(Li) and HPGe detectors. Miscellaneous solid-state detectors. Dosimeters. Neutron detectors and spectroscopy: Neutron counters. Principles, construction characteristics; activation detectors. Neutron dosimeters. Pulse processing; Basic spectrometry system, NIM and CAMAC systems; NIM modules. SCA; MCA; selected radiation measurement techniques. Interfacing of spectrometers to computers. Data acquisition and processing.

(xxiv). **PHY 6422: RADIATION DETECTION AND DOSIMETRY(3 Credit Units)**

Review of radiation detection and interaction with matter. Relation between detection and dosimetry, concept of exposure. Dose unit. Exposure measurements. Absorbed dose. Quality factor. Build-up factors. Charged particle equilibrium. Cavity chambers. Solid state detectors. Radiation safety and environmental pollution. NMR.

(xxv). **PHY 6432: ADVANCED RADIATION PHYSICS (3 Credit Units)**

The radiation field; statistical description; field quantities, energy-weighted quantities. Interactions with matter. Double differential cross sections. Photon, charge particle and neutron interactions. Radiative transport; Boltzmann transport equation; the straight-ahead approximation, point sources. Diffusion approximation. Age theory; Fermi-Eyges equation. Dosimetry. Basic concepts, theoretical foundations, dose interrelations, interface dosimetry, microdosimetry. Shielding and dose calculations: attenuation; build-up factors, dose point kernel methodology. Fundamentals of neutron and accelerator shielding. Non-ionizing radiation; electromagnetic field, microwave radiation, lasers and ultraviolet light.

(xxvi). **PHY 6542: REACTOR PHYSICS (3 Credit Units)**

Neutron induced fission. Energy release in fission, Neutron cycle in thermal reactors. Criticality. The six to Fusion reactors. Reactors control and safety operation. Monitoring of the reactor and its environment. Radiation shielding. Lattice arrangement and fuel Management. Safety assessment of reactors; health physics criteria, probability methods, reliability, methods of evaluating risk, lose of coolant, containment. Reactor accidents: Summary case reviews: Emergency procedures.

## **ii. Postgraduate Diploma (PGD) in Applied Physics**

### **PHILOSOPHY**

The philosophy of the PGD programme is to train and develop scholars who are self-motivated with independent minds and intellectual competence, whose judgments are based upon respect for evidence, ideas, and a deep concern for values, both private and public. In particular, our mission is to develop in the main and applied research in the alternative energy sector, an area currently of concern all over the world. Environmental friendly utilization of energy is a major objective in the development of our manufacturing as well as transportation and communication industries. Notwithstanding, our zeal and efforts contribute to broadening of the frontiers of knowledge in other areas of specialization incorporated in this program. The programme will also prepare graduates for career in the Universities, Polytechnics, Colleges of Education and other institutions of higher learning. The courses are therefore designed to give a balanced overview of the discipline at Post-graduate level. It is hoped that the programme will enable the students on graduation to have the knowledge and acquire the skills which will equip them to take full responsibilities of management in industrial establishment, research and academic institutions.

### **AIMS/OBJECTIVES**

By exposing students to advanced knowledge in Physics, the programme aims at:

- (vii) advancing scientific knowledge in various special areas of Theoretical and Experimental Physics;

- (viii) preparing graduate students for teaching and research positions in our Tertiary Institutions and, specialized positions in our various industrial establishments and government agencies;
- (ix) generating direct technological development support, reflecting our national advancement aspiration, goals and objectives;
- (x) producing scholars who would utilize their knowledge of Electronics/Communications, for human, national, African and global development;
- (xi) producing graduates who apply their knowledge for the advancement of humanity;
- (xii) highlighting awareness especially through equipping and motivating them for a full and balanced development of their personality and the need for replication and the refinement of same;

#### **RATIONALE/JUSTIFICATION**

- iii. The PGD programme aligns with the mission and philosophy of the University which is to provide “the highest standards of teaching, research and community service whilst providing a balanced education for the acquisition of knowledge, practical skills and moral rectitude.”
- iv. The programme aims to meet the demands for higher human resource development to meet national needs using language as the memory of a peoples’ cultures and literature as the mirror for the society.

#### **LIST OF EXISTING ACADEMIC STAFF FOR THE PROGRAMME**

<b>S/No.</b>	<b>NAME OF STAFF/Designation</b>	<b>Qualifications/Year Obtained</b>	<b>Area of Specialization</b>
<b>14.</b>	<b>Dr. Margaret A. Briggs-Kamara Associate Professor</b>	<b>B.Sc.: 1982 PGDE: 1987 M.Phil.: 1991 Ph.D: 2002</b>	<b>Applied Nuclear Physics</b>
<b>15.</b>	<b>Dr. (Mrs) Maria-Assumpta O.</b>	<b>NCE: 1973</b>	<b>Industrial</b>

	<b>Eduok-Akpan</b>	<b>B.Sc.: 1978</b> <b>M.Sc.: 1987</b> <b>M.Eng.: 1994</b> <b>Ph.D: 2007</b>	<b>Engineering</b> <b>Operations. Research</b>
<b>16.</b>	<b>Dr. Godfrey T. Akpabio</b> <b>Associate Professor</b>	<b>B.Sc.: 1981</b> <b>M.Sc.: 1987</b> <b>Ph.D: 2001</b>	<b>Applied Geophysics</b>
<b>17.</b>	<b>Dr. Louis E. Akpabio</b> <b>Associate Professor</b>	<b>B.Sc.: 1983</b> <b>M.Sc.: 1989</b> <b>Ph.D: 2008</b>	<b>Theoretical Plasma</b> <b>Physics</b>
<b>18.</b>	<b>Dr. Aniesua A. Essiett</b> <b>Senior Lecturer</b>	<b>B.Sc.: 1987</b> <b>M.Sc.: 1993</b> <b>Ph.D: 2006</b>	<b>Nuclear and</b> <b>Radiation Physics</b>
<b>19.</b>	<b>Mr. Chibuzo Emeruwa</b> <b>Assistant Lecturer</b>	<b>SSCE: 2004</b> <b>B.Sc.: 2008</b> <b>M.Sc.: 2012</b> <b>Ph.D.: In View</b>	<b>Engineering</b> <b>Physics/Electronics</b>
<b>20.</b>	<b>Mr. Uchechukwu A. Opara</b> <b>Assistant Lecturer</b>	<b>SSCE: 2000</b> <b>B.Sc.: 2005</b> <b>M.Sc.: 2011</b>	<b>Pure &amp; Applied</b> <b>Mathematics</b>
<b>21.</b>	<b>Mr. Raymond C. Abenga</b> <b>Graduate Assistant</b>	<b>SSCE: 2003</b> <b>B.Sc.: 2008</b> <b>M.Sc.: 2014</b>	<b>Theoretical Physics</b>
<b>22.</b>	<b>Patrick Nkemakonam Dikedi</b> <b>Assistant Lecturer</b>	<b>M.Sc</b>	<b>Physics/Applied</b> <b>Geophysics</b>
<b>23.</b>	<b>Paul Uroko Asogwa</b> <b>Senior Lecturer</b>	<b>B.Sc.: 1986</b> <b>M.Sc.: 1990</b> <b>Ph.D.: 2000</b>	<b>Solar Energy/ Material</b> <b>Science</b>
<b>24.</b>	<b>Ernest Benjamin I. Ugwu</b> <b>Lecturer I</b>	<b>B.Sc.: 1988</b> <b>M.Sc.: 2004</b> <b>Ph.D.: 2013</b>	<b>Atmospheric Physics</b>



25.	<b>Ayantunji Benjamin Gbenro</b> Senior Lecturer	<b>Ph.D</b>	<b>Communication</b> <b>Physics</b>
26.	<b>Patrick Ovie Akusu</b> Senior Lecturer	<b>B.Sc.: 1985</b> <b>M.Sc.: 1992</b> <b>Ph.D.: 2002</b>	<b>Radiation &amp; Nuclear</b> <b>Physics</b>

## DETAILED COURSE STRUCTURE OF PGD PROGRAMME IN APPLIED PHYSICS

### FIRST SEMESTER

Course code	Course Title	Credit Hour
PHY 5111	Classical Mechanics	3
PHY 5121	Atomic and Nuclear Physics	3
PHY 5131	Elements of Electronics	3
PHY 5141	Thermodynamics	3
PHY 5151	Solid State Physics	3
PHY 5161	Laboratory Physics I	1
PHY 5171	Numerical Analysis	3
TOTAL		19

### SECOND SEMESTER

Course code	Course Title	Credit Hour
PHY 5212	Quantum Mechanics II	3
PHY 5222	Numerical methods in Physics	3
PHY 5232	Electrodynamics	3
PHY 5242	Laboratory Physics	1
PHY 5252	Special Seminar	1
PHY 5262	Research Project	4

TOTAL	15
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**COURSE DESCRIPTION:**

**1. PHY 5111: CLASSICAL MECHANICS (3 Credit Units)**

Some vector calculus, Rigid body. Motion in generalized coordinates. Transformations and invariance. Conservation laws: Momentum and energy. Fluid dynamics, Lagrange and Hamilton equations; applications. Harmonic oscillator.

**2. PHY 5121: ATOMIC AND NUCLEAR PHYSICS (3 Credit Units)**

Atomic models, Hydrogen atom. Photoelectric effects. Helium. Diatomic molecules, atomic spectroscopy. Nuclear structure. Nuclear models. Radioactivity. Nuclear forces. Nuclear properties. Fission and fusion, spin and magnetic moments. Compound nucleus. Slow and fast neutron reactions, Neutron detection and applications, Range and Magnitude of nuclear forces.

**3. PHY 5131: ELEMENTS OF ELECTRONICS (3 Credit Units)**

Semiconductor devices: the diode and the transistor, Cathode ray tube and uses. Signal amplification, Power amplifiers, Oscillator circuits, Integrated circuits, Logic gates and applications.

**4. PHY 5141: THERMODYNAMICS (3 Credit Units)**

The kinetic theory of gases, laws of thermodynamics and application, thermodynamic potentials, Maxwell relations. Blackbody radiation. Microscopic concepts of thermodynamics; Applications to macroscopic systems. Quantum distribution functions.

**5. PHY 5151: SOLID STATE PHYSICS (3 Credit Units)**

Crystal structure, crystal symmetry. Waves in periodic structure Lattice vibrations. Energy bands in solids. Metals and semi-conductors. Hall Effect and applications. Elasticity, Elastic constants and elastic waves in cubic crystals.

**6. PHY 5161/5242: LABORATORY 1/II (1 Credit Unit)**

Both units cover practical experiments that reflect the courses contents of the 300 and 400

levels of the B.Sc. Physics programme of the Department. Emphasis is on experimental data collection and analysis as well as scientific reporting.

**7. PHY 5171: NUMERICAL ANALYSIS (3 Credit Units)**

Numerical methods in Physics; Numerical differentiation and integration. Statistical data analysis. Errors and approximations.

**8. PHY 5212: QUANTUM MECHANICS (3 Credit Units)**

Wave and particle nature of matter. Existence of discrete energy levels. Eigenfunctions. Hamilton oscillator. Hydrogen atom potential barrier, square well of finite length. W.K.B. approximations. Eigenstates and eigenvalues in Quantum Mechanics. Uncertainty principle. Exclusion principle. Perturbation theory; stationary and time dependent perturbation.

**9. PHY 5222: MATHEMATICAL METHODS OF PHYSICS (3 Credit Units)**

Application of Linear differential equations. Matrices. Fourier transforms. The Bessel, Hermite and Laquerre differential equations. Partial differential equations and physics applications. Tensors and physical examples. Complex variables.

**10. PHY 5232: ELECTRODYNAMICS (3 Credit Units)**

Electrostatics and Magnetostatics. Effects of fields on conductors. Capacitors. Direct and time dependent currents. Electromagnetic induction. Maxwell equations. Electromagnetic oscillations. Energy conservation in changing field. Electromagnetic waves. Non-stationary fields.

**11. PHY 5252: SPECIAL SEMINAR (3 Credit Units)**

A seminar topic will be chosen by the candidate in consultation with his/her departmental adviser, based on his/her intended area of specialization at a possible M.Sc. Physics Degree level.

**12. PHY 5262: RESEARCH PROJECT (3 Credit Units)**

Each candidate will be required to carry out supervised research on a selected area of

Physics, based on his/her special interest. A bound project report shall be presented at the end.

#### **4.0 COLLEGE OF SOCIAL SCIENCES**

##### **4.1 Department of Economics**

###### **i. Master of Science (M.Sc.) in Economics**

###### **A. Programme Description**

The Master's Degree Programme in Economics is erected on the structure available at the undergraduate level and prepares students for administrative and professional positions within the private and public sectors of the economy. The Programme also satisfies the prerequisites needed for admission to post-graduate studies at the doctoral level, and is an excellent preparation for positions in multinational companies and international agencies.

###### **B. Objectives of the Programme**

i. To provide the student with an excellent set of specialties and transferable skills, making them useful to themselves and their country. The student will be given an advanced training in core areas of Economics that are widely used in Economics-based competencies in the context of moral formation, etiquette and integrity.

ii. To provide students with the necessary skills to succeed when they graduate. To this end, we believe that students and staff work together to ensure that students receive the best intellectual training possible and that they develop personal skills which are transferable to the job market. This means that postgraduate students have to take responsibility for their education and Degree, just as staff have obligation to do their best to provide the students with the best

education possible. It is this teamwork which guarantees that the student will enjoy his/her time on the programme and gain the most from it. Reading and using this handbook is the first step towards ensuring a successful partnership between the student and the staff of the Department.

- ii. To equip the students with skills necessary to embark on a career in Economics or Finance, or to enter another profession, requiring the valuable transferable skills and insights obtained from an Economics-related Masters Degree.

### **C. Admission Requirements**

A minimum of a good Second Class Honours (Upper Division) Degree (or its equivalent) in Economics from an accredited institution is required. Potential students are expected to have received a good training in Economics and to have a basic knowledge of calculus and statistics. A minimum of Five (5) O/Level credits, including, Economics, Mathematics and English Language is also required.

Students, willing to study M.Sc. in Economics in the Department are required to submit application form available at the College of Post-Graduate Studies.

### **Selection Criteria**

Students might be required to get through Entrance Examination organized by the Department. Selection will then be based on academic merits from the scores of the entrance examination other requirements mentioned above.

### **D. Graduation Requirements**

The Programme leading to the Master of Science Degree in Economics requires at least 38 hours of graduate credit and at least 18 semester hours. All credit hours applied toward the Degree must be in courses open only to graduate students. No more than one F will be permitted in the Programme. A CGPA of at least 3.00 is required to graduate. The program is organized into three curriculum components:

1. A core curriculum in Economic Theory and Quantitative Methods;
2. A Specialization to be selected from one of those described below; and
3. A research project or thesis.

### **Detailed Course Structure for M.Sc. in Economics**

<b>Core Courses</b>	<b>Credit Units</b>
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• ECO 6181: Advanced Microeconomic Theory	3
• ECO 6192: Advanced Macroeconomic Theory	3
• ECO 6361: Quantitative Research Methods	3
• ECO 6372: Qualitative Research Methods	3
• ECO 6461: Issues in Entrepreneurship	3
• ECO 6671: Seminar	3
• ECO 6682: Dissertation	9
<b>Total</b>	<b>27</b>

### **Elective Courses**

Minimum of three (3) electives	9
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- ECO 6471: Development Economics I
- ECO 6482: Development Economics II
- ECO 6111: History of Economic Thought
- ECO 6381: Econometrics
- ECO 6392: Game Theory
- ECO 6511: Public Sector Economics;
- ECO 6931: Labour Economics
- ECO 6942: Industrial Economics;
- ECO 6881: Environmental Economics
- ECO 6751: Financial Economics;
- ECO 6522: Health Economics
- ECO 6761: International Economics
- ECO 6772: International Economics
- ECO 6781: Monetary Economics

## E. Grading of Work

Courses at the School of Economics and Management are graded according to the criterion-referenced principal grades A, B, C, and F:

### Grade Points Characteristic

A	Excellent	70-100	A distinguished result that is excellent with regard to the following aspects – theoretical depth, practical relevance, analytical ability and independent thought.
B	Very good	60-69	A very good result with regard to the above mentioned aspects.
C	Good	50-59	The result is of a good standard with regard to the above mentioned aspects and lives up to expectations.
F	Fail	0-49	The result does not meet the minimum requirements with regard to the above mentioned aspects

## Course Descriptions

### ECO 6181 Advanced Microeconomic Theory

The course covers rigorous analysis in Microeconomics. The aim of this module is to develop the skills required to analyze and critically evaluate Microeconomic issues and theories and to provide an introduction to recent developments in advanced Microeconomic Analysis. Adopting a formal (i.e. mathematical) approach, the course deals with the foundations of Economics, examining the behaviour of the two most basic agents of the economy, the consumer and the firm, their interaction in markets, and social decisions. The contents are: The consumer – preference and utility, demand functions, comparative statics, choice under uncertainty; the firm – production functions, production sets, profit maximization under perfect competition; markets – general equilibrium, the First and Second Fundamental Theorems of Welfare Economics, Social choice – Arrow’s Impossibility Theorem, rights, mechanism design, bargaining and cooperative solution concepts,

The course emphasizes the formal derivation of results and problem solving. The main theoretical devices employed are optimization theory and elements of game theory, while

mathematical techniques with which students are unfamiliar will be explained during the course or in classes.

### **ECO 6192    Advanced Macroeconomic Theory**

The course examines Economics at the macro level. It is designed to introduce students to the tools and the techniques to address some of the most important questions that are the focus of research in Macroeconomics. Topics include: overlapping generations and intergenerational government policy; continuous-time growth models for government debt policy; endogenous growth and optimal growth policy; equilibrium business cycles and business cycle policy.

There are three components of equal weight, all of which run concurrently in the Second Semester. The order of presentation may vary.

The first component focuses on Open Economy Macroeconomics and is itself divided into three parts. The first explores international linkages between goods and capital markets, and discusses purchasing power parity and interest parity relationships. The second considers a variety of Open Economy Macroeconomics models, specifically the Mundell-Fleming model, the Dornbusch overshooting model, and recent work combining inter-temporal optimization, rigid prices and imperfect competition (the Obstfeld-Rogoff 'redux' model). The third, which is more explicitly concerned with policy questions, considers target zone and currency crisis models.

The second component provides a rigorous but accessible account of some key areas of Macroeconomics. It deals first with the inter-temporal choices of economic agents. This concerns the micro-foundations of Macroeconomics, a micro-framework with which to view the evolution of consumption, capital, output, investment, interest rates and other macro variables. Next, it examines traditional and modern theories of economic growth, exogenous and endogenous, and discusses long-run policy alternatives.

The third component deals with recent developments in the analysis of the relationship between the monetary and real sectors of the economy. It adopts a formal modeling approach, focusing on the role of money in explaining the behaviour of aggregate output in the short and long run. The relationship between money and the rate of inflation is examined, and selected monetary policy issues discussed. The empirical relevance of different modeling approaches is discussed.



The module takes a broad view of the subject and invests time in economic growth, short-run fluctuations, behaviour of consumption and investment, Macroeconomic policy and unemployment. Within each topic major issues and competing theories are presented. Furthermore, empirical methods to test various hypotheses are discussed as each topic is covered. On completing the module students are expected to acquire an understanding of the formal techniques used by Macroeconomists and to gain insight into important issues.

### **ECO 6361 Quantitative Research Method**

This introduces key econometric principles and methods to the students. It will seek to extend and deepen knowledge and develop critical judgment gained in Econometrics. This also introduces the principles and methods of modern financial econometrics and time series forecasting. The student will learn how to apply and interpret the results of these methods as a means of investigating economic and financial issues. Knowledge of using specialist econometric softwares like STATA is also developed.

**There are three components, the first of which is a review of basic Econometric Theory. In formal lectures, the following topics are covered:**

- (a) Statistical theory and methods - probability, random variables, sampling, estimation, and hypothesis testing;
- (b) Econometric theory - the simple two-variable linear regression model, and the k-variable linear regression model;
- (c) Statistical inference - single-parameter tests and interval estimators of coefficients, linear restrictions, tests of joint hypotheses and structural stability, and dummy variables;
- (d) Econometric problems - autocorrelation, heteroscedasticity, and simultaneous equation models.

**The second component examines the theory of prediction as a statistical problem and, at an intermediate technical level, recent developments in the analysis of non-stationary series. Simulation is used to illustrate the theory. The topics studied are:**

- (a) Motivation - the prediction problem, the mean square error criterion, and linear least squares;

(b) Stationary time series - ARMA models as approximations to first and second moments, auto-covariance, and autocorrelation functions;

(c) Non-stationary - the sampling distributions of regression estimators, spurious regression, co-integration, error correction models, and testing for unit roots.

**The third component is training in the analysis of economic data and the interpretation of econometric results. In formal lectures, the following topics are covered:**

(a) Dynamic modelling - the general to simple methodology, and estimation of the consumption function;

(b) Application of co-integration - the Engle-Granger two-step procedure, Johansen's technique, modelling foreign exchange markets, and estimation of demand for money functions;

(c) Modelling the labour market - wage equations.

### **ECO 6381 Econometrics**

This course is designed to introduce students to those areas of Mathematics that are commonly used in economic analysis. It will provide grounding in mathematical techniques essential to postgraduate learning – in particular Multivariate Calculus, Constrained Optimization and Matrix Algebra, Static Optimization with particular emphasis on Classical Mathematical Programming, modeling discrete dependent variables, economic applications with focus on particular problems in general equilibrium analysis, dynamic analysis, concentrating on linear and non-linear differential equations and dynamic optimization. Applications will include examples from macroeconomics, economic growth, economics of natural resources and political business cycle theory.

### **ECO 6111 History of Economic Thought**

The course is to give a background and understanding of development of economics ideas and theories. It thus provides a comparative survey and assessment in economic thought. Topics include: Ideas of the early Christian Fathers, Islamic Ideas on economic activity; Classical economics; neo-classical school of thought; positive and welfare schools of economic thought; institutional economics; Keynesian School of Economic Thought; evolution and contemporary

development of Marxian School of Economic Thought; Contemporary state of development in economics and future prospects; Marginalists and modern schools of economic thought; African economic ideas; and future prospects.

### **ECO 6471     Development Economics I**

The objective of this course is to give students an introduction to major themes in the modern microeconomics of development, using both empirical and theoretical methods in a manner that will give students a preparation for careers in research and policy analysis. It covers core development economics material and discusses the application of methods of modern micro-economic analysis to developing countries. The basic aim is to use our understanding of economic theory and econometric methods to analyze various aspects of policy as pursued by developing countries. On completion of the course, students will have: an understanding of how the economies of Developing Countries function and can be influenced by policy and institutional reform, conveyed at three levels: a grasp of the main factors determining the wealth and poverty of nations; the ability to analyze market structure and behaviour, both urban and rural, in Developing Countries; an array of problem-solving techniques designed to improve the operation of markets. An emphasis will be placed on trying to analyze the causal impact of policy.

### **6482     Development Economics II**

This is the second aspect, which aims to provide a rigorous application of the principles of economic theory, with a significant quantitative component, to the macro problems of developing countries and global development, and economies as a whole. The purpose of this course is to give an opportunity to students to specialize in some of the many areas that fall under the development economics umbrella. Topics covered include: antipoverty policies for economic growth and development, public expenditure policies and political economy issues in a global economy, Agricultural and Structural Transformation, Openness and Development; Institutions and Development; The Foundations of Development Monetary and Exchange Rate Policies; Poverty; Risk and Insurance; Health and Human Development; Financial Flows to Developing Countries.

### **ECO 6522 Health Economics**

This course addresses economic issues concerning health and health care. The market for health care fails to satisfy most of the key conditions of a perfect market, leading to an efficiency-based justification for government intervention. At the same time, health can be regarded as a special commodity, because it is fundamental to individual's well-being and flourishing, which may give an equity-based justification for government intervention. The aim of the module is to examine these justifications, and to see the role played by two different normative approaches (Welfarist and non-Welfarist) to the problem.

### **ECO 6761 International Economics**

It covers both international trade and finance. The course is to develop the student's ability to analyze issues in international economics such as new trade theory, strategic trade policy, political economy of trade policy, and international fiscal policy. And it also addresses the theory and application of international finance, including exchange rate theory, models of exchange rate determination and the efficiency of international financial markets. It will also analyze the most important current research in the theory of risk sharing across international financial markets. Several aspects of trade policy are examined, including its economic rationale, the policy instruments used, and their welfare implications with the coverage of topics like: tariffs and non-tariff barriers to international trade, strategic trade policy and the political economy of trade policy, GATT/WTO, and trade bloc formation. The emphasis is on both technical and institutional issues.

We focus on macroeconomic and monetary relations between countries, particularly the twin issues of exchange rates and the balance of payments. This module reviews the main theories of exchange rate determination and tests of these theories, and provides accounts of the operation of international financial markets and country experiences in adjustment to external payments imbalances. The coursework assignment gives students the opportunity to apply their knowledge to examples of their choice.

What determines countries' production structures and the consequent patterns of international trade? How does trade shape of level and evolution of the distribution of income within and between countries? What are the arguments for and against trade policy? The course will cover

comparative advantage (including classical and Heckscher-Ohlin trade theory); extensions of this to incorporate monopolistic competition: 'new economic geography' approaches to spatial and international economics: trade policy. These topics have in common an international general equilibrium approach. Material will be primarily micro-economic theoretic, and will also include empirical tests of theory.

### **ECO 6772     International Economics II**

International trade is undertaken by firms, and a large part of it takes the form of intra-industry trade. How do firms choose alternative modes of supplying international markets, and what determines their success? The course will cover models of international oligopoly and intra-industry trade: the multinational enterprise: trade with heterogeneous firms. The focus will be on the interaction of firms within industries and the implications of this for international trade. Material will be primarily micro-economic theoretic, and will also include empirical tests of theory and other recent developments in the empirical trade literature.

### **ECO 6392     Game Theory**

This course deals with the analytic methods used to investigate the manner in which rational economic agents strategically interact with each other in situations of conflicting interest. The formal topics covered are: introduction to games, static games of complete information, dynamic games of complete information, and games of incomplete information. Each type of game is illustrated by economic examples.

### **ECO 6781     Monetary Economics**

This course introduces money and banks (microfoundations) and the implications for allocative efficiency and regulation. It covers an overview of the role of money in macroeconomic models and the determination of both the demand for and supply of money as well as its interaction with the demand for and supply of other financial assets, the money supply process and the goals and instrument targets of Central Banks, the study of monetary policy and the inflation bias, money as a medium of exchange, and money as a store of value.

### **ECO 6751     Financial Economics**

The course is designed to cover theories of behavioural economics and finance, and the use of experimental economics in testing those theories. Students will gain a critical understanding of

methodological considerations including sample design and selection, design of experimental treatments, incentives, control and psychological biases. Topics include economic behaviour in markets, bargaining, auctions, game theory, public choice, and in particular choice under uncertainty and choice over time, the complex roles of asymmetric information, signaling, adverse selection, risk aversion, agency and moral hazard in banking activities, the principles and practices of the workings of stock exchanges, regulations and structures, and the implications of these for trading, analysis of the role of information, market liquidity and trading costs to major players in financial markets, a formal analysis of models of asset pricing, covering a variety of topics in the area of stock and option pricing, is presented. Specific topics include: C-CAPM, the stochastic discount factor, factor pricing models, and present value models, issue of excess volatility in financial markets, and recent work on behavioral finance. Students will consider both underlying theoretical analyses and practical/empirical applications.

#### **ECO 6461    Issues in Entrepreneurship**

The course equips students with leading methodologies and practices in the project management field. Project management is a requirement for professionals in many fields, with many employers now identifying project management skills as vital for corporate success. Topics include: Project management deliverables, Stakeholder communications, Defining and managing quality, Requirements vs Expectations, Project politics, Deliverable review and approval, Bearing bad news, Managing the customer team, Managing sub-contractors, Advanced scope management, Project information, Project management vs Project leadership, The Business Case, Advanced Risk Management, The project management office (PMO), Realizing Project Benefits.

#### **ECO 6942    Industrial Economics**

This course provides an understanding of the structure, operation and performance of modern organizations and industries and develops knowledge of the contemporary methods for analyzing modern organization and industries. It covers static and dynamic models of pricing in monopoly and oligopoly, with implications for public policy. Indicative topics include price discrimination, oligopoly pricing, collusion, product differentiation, search, behavioural IO, horizontal merger analysis, vertical relationships. On completion of this course, students are able to evaluate the strategic behavior of modern industries and organizations, and to analyze the key issues concerning contemporary industries and organizations.

### **ECO 6511 Public Sector Economics**

This course covers the theoretical and practical issues in taxation and public expenditure through the study of both the positive and normative theory of government policy. The first part of the course is devoted to taxes and transfers. Topics will include: welfare measurement and income transfers; optimal taxation; and the political economy of taxes and transfers. The second part of the course is devoted to service delivery. Topics will include: choice and competition in education and health care markets; performance-based contracting with, and within, delivery organizations; and governance and accountability. The final part of the course covers the emerging field of behavioral welfare economics.

### **ECO 6931 Labour Economics**

The first half of the course examines explanations for the wage distribution based on competitive and imperfectly competitive labour markets. Starting from the standard theory of competitive labour markets, we introduce human capital, to explain wage differences between individuals and over the lifecycle, and explore the roles of education, training, and compensating differentials. We then identify features of the labour market that are hard to reconcile with perfect competition, and consider sources of imperfect competition – trade unions, monopsony power and search and matching frictions – and their implications for wages and employment. In the second half of the course we focus on the contract between the individual employee and employer. This component discusses the implications of three reasons for having an employment contract, rather than transacting purely in a spot market: (1) to allocate risk in a way different from a spot market; (2) to enhance the efficiency of investment decisions by protecting the return on investments by one party from being captured by the other; and (3) to motivate the employee by making reward depend on performance via performance-related pay, efficiency wages and promotion.

### **ECO 6372 Qualitative Research Methods**

Research Methods is designed to provide the necessary training to undertake advanced level research and provides a solid foundation for undertaking the dissertation. It focuses on the nature of research in economics and social sciences in general, examining the study skills necessary to manage and undertake a research project. A broad view is presented, however, dealing with issues pertinent to all research in economics. The course includes a discussion of: literature

reviews and data sources; the status and growth of economic knowledge; the ethics of economic research; and the overall design of a research project – aims, philosophy and methods, evaluating existing research, and writing up and disseminating findings.

There are two overlapping parts. One explores what it means to explain economic phenomena and other issues in the philosophy of economics, making specific reference to the use of econometric methods, experiments and game theory. The other examines how economists develop their thinking, covering both applied and theoretical economics and based on a set of articles on questions such as purchasing power parity, corruption and intellectual property rights. Specific research questions are identified in order to explain how these are addressed. In both parts, lectures on the main issues will be combined with student presentations on assigned reading. The economic topics discussed may vary from year to year, reflecting new research, the expertise of the lecturers concerned and the interests of the students.

**ECO 6682 Dissertation**

The Masters Programme culminates in a dissertation, which provides an opportunity for the student to investigate in greater detail a subject that he/she has already studied as part of his/her Masters Programme. The work will enable the student to exercise critical judgment and illustrate how economic analysis has relevance to economic and general decision-taking. A stimulating and challenging part of the programme, the dissertation represents a major piece of independent work.

**G. Information: Disciplinary actions against plagiarism**

The University views plagiarism very seriously, and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University.

**THE LIST OF STAFF FOR M.Sc. POST-GRADUATE PROGRAMMES IN ECONOMICS**

S/N	NAME	QUALIFICATION	UNIVERSITY	DISCIPLINE	AREA OF	AVAILABILITY
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			POSITION/RANK		SPECIALIZATION	TY OF CV
1.	Michael Kwanashie	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Professor (VC)	Economic Theory	YES	YES
2.	Cyril S.Ige	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Professor	Econometrics and Mathematical Economics	YES	YES
3.	Oyinlola Olaniyi	PhD	Professor	Public Sector Economics	YES	YES
4.	Gilbert Adoghor	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Professor	Monetary Economics	YES	YES
5.	Hyacenth Ajie	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Associate Professor	Monetary Economics	YES	YES
6.	Obansa, Sumaila A.J	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Associate Professor	Health Economics and Quantitative Economic Analysis	YES	YES
7.	Mbatomon Ako	PhD( Financial, Industrial and Development Economics) M.Sc Agric Economics	Senior Lecturer	Financial Economics/ Development Economics	YES	YES

8.	George T. Irele	PhD (Land Economics) MBA (Finance and Marketing) B.Sc. Economics and French	Senior Lecturer	Monetary Economics	YES	YES
9.	Omolara Akanji	PhD Finance M.Sc. Agric Economics	Senior Lecturer	Economic Policy	YES	YES

## **ii. Postgraduate Diploma (PGD) in Economics**

### **Introduction**

Veritas University (The Catholic University of Nigeria) was established in 2008 with only nine (9) programmes and got accredited for all in 2012. Under a new Vice Chancellor sustained effort has been made to increase the programmes in both number and variety, thus improving its appeal to all youths and parents, consequently addressing the base for the employment of its graduands in the labour market.

The need for bringing in post graduate diploma and master degree programmes is based on the same consideration and more importantly to improve the research base of the University and provide students with a window of career excellence. This therefore, describes the strategy of our post graduate programmes in the department and within the success of this strategy, we hope in the nearest future to introduce the PhD programme.

### **Philosophy**

The philosophy of the Post graduate programmes is encapsulated in the following:

- i. Create a core agenda for post graduate studies and research devoted to producing Nigerians who are determined to up-root poverty from Nigeria and Africa;
- ii. Train people who are deep in Christian formation in character, hard work and able to challenge low capacity, ineptitude and low performance and;
- iii. Increase national efficiency in the use of resources.

### **Objectives**

The objectives of the programme include:

- i. Identify the challenges to Nigeria's and Africa's development and seeks solution;
- ii. Deepen the understanding of African development challenges and creates a holistic approach to addressing them;

- iii. Develop a networking approach to the solution of Africa's development challenges;
- iv. Improve the environment of policy formulation by sharpening creative tendency in the researches and;
- v. Ensure that the individual researcher goes through a Christian formation development approach.

### **Admission Requirements**

The candidates of these programmes must have obtained at least a Third Class Degree classification from Veritas University, Abuja or any approved university or the equivalent in Nigeria or other countries. In addition, candidates must possess at least 5 credits at O' Level in the composition of subjects required which must include credit in English language and Mathematics. They may be required to satisfy an interview panel that they are capable of completing the course of their choice successfully. Besides, the candidates must submit his/her academic transcript to back-up their application on request by this University. The duration of these Post-Graduate Diploma programmes of this Department is Nine (9) months of two (2) Semesters.

### **Requirements for Graduation:**

A student will be expected to register and pass a minimum of 30 credit units made up of 15 credit units for core courses and 9 credit units for electives, as well as submit approved research project relevant to the area of specialization made up of 6 credit units.

### **Detailed Course Structure for PGD in Economics**

<b>Core Courses</b>	<b>Credit Units</b>
• ECO 5161: Microeconomic Theory	3
• ECO 5172: Macroeconomic Theory	3
• ECO 5261: Introductory Mathematics for Economics	3
• ECO 5432: Strategic Planning	3
• ECO 5551: Seminar	3
• ECO 5562: Project	6

<b>Total</b>	<b>21</b>
<b>Elective Courses</b>	
Minimum of three (3) electives	9
<ul style="list-style-type: none"> <li>• ECO 5442: Techniques of Project Analysis and Management</li> <li>• ECO 5842: Energy production and electricity supply</li> <li>• ECO 5852: Techniques in Environmental Management</li> <li>• ECO 5592: Basic Health economics Tools</li> <li>• ECO 5451: Taxonomy of Planning</li> <li>• ECO 5591: Health Economics</li> <li>• ECO 5861: Global Energy Market</li> <li>• ECO 5871: Environmental Economics</li> </ul>	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>

## **COURSE DESCRIPTION**

### **ECO 5161: MICRO ECONOMIC THEORY**

Economics and its Meaning and Scope, Idea of Utility and Money, Market Characterization, Production and Production Planning and Management, Interaction of Market and Production, Uses of Linear and other Programming Methods, Consumer Optimization Analysis, Production Optimization and Welfare Economics, Preference Theory in different Scope, Equilibrium Analysis, Search Theory and Labour Economics, Policy and Practical issues in Economics. (Growth, Development, Trade, Investment and so on).

### **ECO 5172: MACRO ECONOMIC THEORY**

Consumption, Investment and Income Analysis, Taxation and Objectives of Government, Trade and Welfare Economics and Financial Economics. Policy Analysis with practical examples in the state of the nation regarding Environment, Health, Energy, Strategic issues and so on. Roll of Non- Governmental Organization and International Agencies in Policy and Funding.

### **ECO 5261 INTRODUCTORY MATHEMATICS FOR ECONOMICS**

Regression analysis, Basic statistics, Probability theory, Matrix, Survey methodology and Graphical presentation.

### **ECO 5451: TAXONOMY OF PLANNING**

History of Planning, Central Planning, Planning in a Private Sector led Economy, Planning Methodology, Techniques of Planning, Efficiency and Effectiveness of Planning, Case for and against the Planning Tradition

### **ECO 5432: STRATEGIC PLANNING**

Evolvement of Strategic Planning, The Seven (7) Phases of Strategic Planning, Work sheets of Strategic Planning, Effective Management of the Strategic Planning Process, Role of the Chief Executive Officer and the Board of Directors, Focus Groups and Clientele, Tools of Strategic Planning, Use of Task Forces, Stakeholders (external and internal), Summary of Tools, Techniques and Process

### **ECO 5862: GLOBAL ENERGY MARKET**

Supply and Use of Energy, Global Sources of Energy, Local Sources of Energy, Techniques of Sourcing and Producing Energy, The Economics of Energy Sourcing, Stages of Electricity Supply in Nigeria, UN Studies on Nigeria's Electricity Supply and Use, Capacity Building for Electricity Supply in Nigeria and Future of Electricity Supply and Use in Nigeria

### **ECO 5871: ENVIRONMENTAL ECONOMICS**

Economics of Population and Global Control and Responsibility, Theory of Resource Economics, Theory of Resource Control and Management, Global Concerns on the Environments, Theory of the Glass House Effect, the Solar System, Ozone Depletion and the Global Concern, Review of all UN Summits on the Environment Desertification and the Global Concern (United Nation's Environmental Programmes – UNEPs, Including the Montreal Protocol), Aforestation and Conservation, Non-Governmental Organization and Environmental Concerns, Use of Global Resources, and Politics of Population Management. Environmental and Management Economics, Introduction to Environmental Economics, External Economies,

Taxation and Subsidy, Resource Economics, Resource Control and Management, Public Finance and Investment, Petroleum Industry Act, the Ecosystem and Eco-balance.

### **ECO 5591: HEALTH ECONOMICS**

Health Economics and its subject matter, Basic Economic Rules, Supply and Demand for Health Care Services, Information and Insurance Market, Key Players in the Health Sector, Macro Economic Tools in Health Management, Statistical Tools for Health Management, Consumer Choice and demand in Health Care, Review of the Nigeria Health Sector.

### **ECO 5562: PROJECT**

#### **ECO 5442: TECHNIQUES OF PROJECT ANALYSIS AND MANAGEMENT**

Definition of a Project, Techniques of Project Analysis, Cost Benefit Analysis, Project Evaluation and Review Techniques (PERT, PERT-Time and PERT-Cost), Network Analysis, Linear and Mathematical Programming, Trends in Project Analysis

#### **ECO 5842: ENERGY PRODUCTION AND ELECTRICITY SUPPLY**

Distribution of Electricity in Nigeria, Inputs for Electricity Supply in Nigeria, Inputs for Electricity Distribution in Nigeria, Pricing Policy of Electricity in Nigeria, Organization of Distribution and Supply of Electricity in Nigeria, Politics of Electricity Supply and Distribution in Nigeria, Resource Control and Management, Energy Policy.

#### **ECO 5852: TECHNIQUES IN ENVIRONMENTAL MANAGEMENT**

Environmental Identification Techniques, Public Awareness, Specific Technologies for Adaptation to Solving the Problem, Management of Local Issues (Population, Land Utilization, Environmental Cleanliness, Desertification and Control), Environmental Impact Assessment

#### **ECO 5592: BASIC HEALTH ECONOMIC TOOLS**

Micro Economic Tools, Health Statistical Tools, Economic Efficiency and Course Benefit Supply and Demand Issues, Production, Cost, and Technology of Health Care, Consumer Choice

and Demand, Health care Labour Market on Professional , Social Insurance, Government Intervention on Health care Market, Government Regulation Mechanisms, Comparative Health Care Systems, Epidemiology and Economics (HIV/AIDS, Polio)

### LIST OF ACADEMIC STAFF

S/N	NAME	QUALIFICATION	UNIVERSITY POSITION/ RANK	DISCIPLINE	AVAILABILITY	ACCEPTED PRESENT AT N.U.C. VERIFICATION
1.	Michael Kwanashie	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Professor (VC)	Economic Theory	YES	YES
2.	Cyril S. Ige	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Professor	Econometrics and Mathematical Economics	YES	YES
3.	Oyinlola Olaniyi	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Professor	Public Sector Economics	YES	YES
4.	Gilbert Adoghor	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Professor	Monetary Economics	YES	YES
5	Obansa S.A.J	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Associate Professor	Health Economics/ Econometrics	YES	YES
6.	Hyacenth Ajie	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Associate Professor	Monetary Economics	YES	YES
7.	Mbatomon Ako	PhD (Financial, Industrial and Development Economics) M.Sc. (Agric. Economics)	Senior Lecturer	Financial Economics/ Development Economics	YES	YES



8.	George T. Irele	PhD (Land Economics) MBA (Finance and Marketing) B.Sc. (Economics and French)	Senior Lecturer	Monetary Economics	YES	YES
9.	Omolara Akanji	PhD (Finance) M.Sc. (Agric. Economics) B.Sc. (Agric. Economics)	Senior Lecturer	Economic Policy	YES	YES
10.	John Enahoro	Ph.D. (Accounting)	Senior Lecturer	Environmental Accounting	YES	
11	Anuli Regina Ogbuagu	B.Sc. (Economics) M.Sc. (Economics) Ph.D. (Economics)	Lecturer II	Monetary Economics	YES	
12	Modestus Nsonwu	B.Sc. (Finance and Banking) M.Sc. (Economics)	Lecturer II	Quantitative Economics	YES	
13	Tobechukwu Agbanike	Ph.D. (Accounting)	Lecturer II	Accounting/ Economics	YES	YES

14	Benjamin Oguchi	B.Sc. (Economics) M.Sc. (Economics)	Assistant Lecturer	Economic development and Planning	YES	
15	Chris AC-Ogbonna	B.Sc. (Economics) M.Sc. (Economics)	Assistant Lecturer	Development Economics	YES	

## **4.2 Department of Political Science and Diplomacy**

### **i. Course Content for Masters of Science (M.Sc.) in Political Science and Diplomacy**

#### **Introduction**

The Department offers a degree programme leading to the award of a Master of Science (M.Sc.) degree in Political Science and Diplomacy. The degree programme is designed to provide both academic and professional base from which graduates may continue their personal, academic and professional development as they assume managerial responsibilities in either public or private sectors of the society. The programme is therefore rigorous and demanding, but in all respect worthwhile and rewarding.

The graduates of M.Sc Political Science and Diplomacy of Veritas University, Abuja acquire knowledge of an interdisciplinary nature as is required of public administrators, career politicians, and diplomats in an increasingly globalized world. In addition to understanding and gaining competences in Political Science and Diplomacy, the graduates of this field will be prepared to communicate in at least one foreign language.

Graduates of M.Sc Political Science and Diplomacy may be considered suitable as career diplomats, administrators in international firms, managers of national and international government and non-governmental projects, and also workers in the mass media. The graduates are equally prepared for further studies and research endeavours at the Doctorate level and as participants in research teams.

#### **VISION**

The vision of the Department is to develop a deeper knowledge of the Political, Administrative and Diplomatic studies and practice where the discipline is pursued with effective articulation of ideas aimed at impacting on the society; and

To excel in the study of Political and Diplomatic studies with a view to nurturing the courses offered through teaching and research undertaken in the search for truth and a just world order.

## MISSION

To effectively structure the discipline in anticipation of the needs of the graduates, the government and the society at large; thereby enhancing political, socio-economic and moral development of the country, and scientific research to advance knowledge in the individual student.

## List of Academic Staff

Name of Academic Staff	Area of Specialization	Discipline	Qualification	Rank
Anefu Ejembi Unobe	Political Science	Political Science	B.Sc, M.Sc., PhD	Professor
John Gwangari	Nigerian Legal System	Civil Law Canon Law	B.Phil.; B.D. Rome STL; DCL. Rome L.L.B. Jos; B.L. Abuja	Professor
Victor Egwemi	Political Science	Political Science	B.Sc., M.Sc., ABU PhD. Usmanu Dan Fodio	Associate Professor
Basil A. Ekot	Political Theory/ African Studies	Political Theory & African Studies	B.Phil.; B.D. Rome M.Phil; Ph.D. Sydney	Senior Lecturer
Jooji Tyomlia Innocent		Political Science	BTh., M.Sc., Ph.D	Senior Lecturer

Dominic C. Shimawua	Public Administration	Public Administration	M.Sc., M.A, PhD	Senior Lecturer
Sunday Inyokwe Otinche	Public Administration	Public Administration & Public Policy	B.Sc. Unijos; M.Sc. PhD UniAbuja	Lecturer I
Emmanuel C. Okwara	International Affairs/Diplomacy	International Relations/Strategic Studies	B.Phil, B.D, M.Sc. PhD	Lecturer II

### Areas of Specialisation

- I. International Relations/Diplomacy
- II. Political Theory
- III. Public administration and Public Policy
- IV. Political Economy

### Core courses offered

Credit Units

#### First Semester

PSD 6411	Theories of Development and Underdevelopment	3
PSD 6221	Research Methods and Empirical inquiry	3
PSD 6131	International Relations Theory and Practice	3
PSD 6241	Political Theory and Philosophy	3
PSD 6151	History of Diplomacy	3

#### Second semester

PSD 6352	Issues in Nigerian Government and Politics	3
PSD 6262	African Political Theory and Philosophy	3
PSD 6472	The State and the Economy	3
PSD 6182	Nigerian Foreign Policy	3
PSD 6192	Contemporary Diplomatic Practice	3

### **Third Semester**

PSD 6293 Thesis 6

#### **Electives in Area of Specialization:**

##### ***International Relations/Diplomacy***

PSD6101	Principles of International Law	2
PSD 6111	International Organization and the UN	2
PSD 6161	African International Relations	2
PSD 6132	Conflict Resolution and Peace Keeping	2
PSD 6142	International Political Integration	2
PSD 6152	Special Topics in International Relations (Globalization, International Terrorism, etc)	2
PSD 6162	Strategic Studies	2

##### **Political Theory and Philosophy**

PSD 6271	African Political Thought	2
PSD 6281	Development of Ancient and Medieval Western Political Thought	2
PSD 6292	Contemporary Political Thought	2
PSD 6202	Concepts in Political Theory	2
PSD 6212	Topics in Political Philosophy	2

##### **Public Administration and Public Policy**

PSD 6321	Public Administration in Nigeria	2
PSD 6331	Rural Development Administration	2
PSD 6341	Public Policy Analysis	2
PSD 6352	Urban Development Administration	2
PSD 6362	Comparative Local Government Administration	2
PSD 6372	The Legislative Process in Nigeria	2
PSD 6382	Intergovernmental Relations and Public Policy in Nigeria	2
PSD 6182	Intelligence and Security	2

## **Political Economy**

PSD 6491	Theories of Political Economy	2
PSD 6401	The Political Economy of Africa	2
PSD 6412	International Economic Relations	2
PSD6422	Selected Topics in Nigerian Political Economy	2
PSD 6181	Economic Diplomacy	2

## **Course Description**

### **PSD 6411 Theories of Development and Underdevelopment**

This course aims at highlighting the development problems of the Third World in general with particular emphasis on Africa and Nigeria. The various theoretical approaches applied to illuminate as well as solve the problem will examine.

### **PSD 6151 – History of Diplomacy**

The course examines the origin and practice of diplomacy as one of the tools that defines inter-state relations. It considers the practice of diplomacy from the pre-state period and also traces the historical development of modern diplomacy. The course provides fact knowledge of essential facts from the history of diplomacy such as foreign policy tools of particular states in the context of international history.

### **PSD 6352 Issues in Nigerians Government and Politics**

This course aims at a higher level of examination of the complex issues in Nigerian Government and Politics, including development, federalism, leadership, constitutionalism, corruption, democracy and nationality.

### **PSD 6221 Research Methods and Empirical Inquiry**

This course will expose students to the methods and techniques of conducting social and political research. It will address the various stages of the research process from conceptualization of the research problem to the analysis and interpretation of data.

**PSD 6262 African Political Theory and Philosophy**

This is a focus on Africa traditional political ideas and their interaction with contemporary African politics, as well as how this interplay has shaped contemporary thought and practice.

**PSD 6131 International Relations: Theory and Practice**

This course examines the major theories on the functioning of international system. Their research utility for research as well as their weakness is also examined.

**PSD 6472 The State and the Economy**

This course is an analytical approach to themes in Nigerian Political Economy. It focuses on the interplay of the state with sectoral performance of the economy.

**PSD6241 Political Theory and Philosophy**

This course examines the works of key political thinkers in the context of current political issues and problems.

**PSD 6182 Nigerian Foreign Policy**

This course examines the underlying principles of Nigerian foreign policy in relation to the dynamics of change and stability of Nigerian development.

**PSD 6101 Principles of International Law**

This course focuses on the rules that govern international relations at peacetime as illustrated by texts and cases.

**PSD 6111 International Organizations and the UN**

This course focuses of International regional, functional, universal organization and how they mirror contemporary international society as well as act as a force for change.

**PSD 6161 African International Relations**

This course examines the dynamic of changes as well as features of inter-African conflict and cooperation.



### **PSD 6132 Conflict Resolution and Peacekeeping**

This course examines the cause of conflict at the international level and the mechanism for their resolution as well as the evolution and practice of international peacekeeping.

### **PSD 6142 International Political Integration**

This course examines the various efforts at international regional integration around the world particularly in West Africa and Europe. The problems and prospects of these efforts are also examined.

### **PSD 6152 Special Topics in International Relations**

This course addresses the dynamic character of international relations by focusing at such topic issues as terrorism, globalization, international human rights and women issues.

### **PSD 6181- Economic Diplomacy**

The course provides students with a comprehensive understanding of the economic dimension of foreign relations of states and the role of economic diplomacy in thereof. The course will also enrich students with knowledge about the actors of economic diplomacy, elements of economic diplomacy tools of economic diplomacy etc. Thus, it enhances professional training for future diplomatic career, as well as for private sphere with international business activities.

### **PSD 6271 African Political Thought**

This course is a focus on the political ideas of selected African thinkers and the impact and significance of their ideas for African political development included are early and contemporary political thinkers such as Ibn Khadoun, Kwame Nkrumah, Julius Nyerere, Leopold Senghor etc.

### **PSD 6281 Development of Ancient Medieval Western Political Thought**

This course examines the political thought of western thinkers from Plato up to Machiavelli.

### **PSD 6192 – Contemporary Diplomatic Practice**

The subject provides students with knowledge of the evolution, characteristics and principles of current diplomacy of existing for service system and diplomatic activities, its functioning and practicing basic skills necessary for working in Foreign Service. In addition, the course aims at

introducing various aspects of diplomatic practices to support the development of skills of contemporary diplomats.

**PSD 6292 Contemporary Political Thought**

This course focuses on the intellectual roots of contemporary democracy. The contributions of analytical philosophy and existentialism in political understanding.

**PSD 6202 Concepts in Political Theory**

The nature of conceptual thought about politics is the focus of this course Examination of problematic concepts central to both traditional and scientific theory; power, authority, community, justice, the political and others are underplayed.

**PSD 6212 Topics in Political Philosophy**

Investigation at an advanced level of selected problems of political philosophy

**PSD 6321 Public Administrations in Nigeria**

This course examines the evolution development of public administration in Nigeria since the colonial period.

**PSD 6331 Rural Development Administration**

This course focuses on the strategies and methods of carrying out rural development. It will emphasize the problems of rural development administration in Nigeria

**PSD 6341 Public Policy Analysis**

This course introduces students to the methods of analysing public policy. Students will become acquainted with the central concepts employed in such analysis.

**PSD 6362 Comparative Local Government Administration**

This course will examine the various models of Local Government Administration and seek assess and compare them with the Nigerian experience.

**PSD 6352 Urban Development Administration**

This course examines the problems of urban areas and assesses the various models available in the development administration of these areas.

**PSD 6372 The Legislative Process in Nigeria**

Principle procedures and the problems of the legislative process are the focus of this course.

**PSD 6491 Theories of Political Economy**

An examination of the methodological as well as substantive issues in the study of societal change. It looks at the structures and processes underlying the movement of society. Theories about the organisation of production and the distribution of socially generated surplus in various social formations. Both capitalist and pre-capitalist are looked into.

**PSD 6401 The Political Economy of Africa**

The course examines the contemporary dynamics of African reality; the class character of African societies; the state in the process of capital accumulation; neo-colonial dependency; ideologies of legitimisation. It further examines Africa's role and functions in the world capitalist system from its evolution in the 15<sup>th</sup> century to the present.

**PSD6412 International Economic Relations**

The dynamics of the international economic system, international trade, international economic and financial institutions, regional economic groupings and South-South cooperation.

**PSD 6422 Selected Topics in Nigerian Political Economy**

This deals with the nature of the state, society and economy in Nigeria; the underlying basis of the organization of production, distribution and exchange and the role of the Nigerian state and social classes in these processes; Nigeria and the world economy.

**PSD 6182- Intelligence and Security**

Explanation of key concepts and subject areas associated with intelligence and security. Topics to be examined include: the nature of Intelligence and Security, Intelligence and Security ethics, History and Development of Intelligence, Intelligence in pre-modern periods, the growth of Nationalism and Intelligence systems, Modern Power Politics and Intelligence systems, National Intelligence Organizations, the Concept of Surprise in Intelligence, Causes of Intelligence Failures, the responsibilities of individuals engaged in private and public security as well as the latest trends, concerns and issues in the security industry today. The security functions, fundamentals of defence and specific threats and solution are equally recovered

## **ii. Course Content for Postgraduate Diploma (PGD) in Political Science**

### **Introduction**

The Department offers a degree programme leading to the award of a Post Graduate (PGD) degree in Political Science and Administrative Studies. The degree programme is designed to provide both academic and professional base from which graduates may continue their personal, academic and professional development as they assume managerial responsibilities in either public or private sectors of the society. The programme is therefore rigorous and demanding, but in all respect worthwhile and rewarding.

The graduates of PGD in Political Science and Administrative Studies of Veritas University, Abuja acquire knowledge of an interdisciplinary nature as is required of public administrators, career politicians, and diplomats in an increasingly globalized world. In addition to understanding and gaining competences in Political Science and Diplomacy, the graduates of this field will be prepared to communicate in at least one foreign language.

Graduates of PGD Political Science and Administrative Studies may be considered suitable as career diplomats, administrators in international firms, managers of national and international government and non-governmental projects, and also workers in the mass media. The graduates are equally prepared for further studies and research endeavours at the Doctorate level and as participants in research teams.

### **VISION**

The vision of the Department is to develop a deeper knowledge of the Political, Administrative and Diplomatic studies and practice where the discipline is pursued with effective articulation of ideas aimed at impacting on the society; and

To excel in the study of Political and Diplomatic studies with a view to nurturing the courses offered through teaching and research undertaken in the search for truth and a just world order.

### **MISSION**

To effectively structure the discipline in anticipation of the needs of the graduates, the government and the society at large; thereby enhancing political, socio-economic and moral

development of the country, and scientific research to advance knowledge in the individual student.

### List of Academic Staff

Name of Academic Staff	Area of Specialization	Discipline	Qualification	Rank
Anefu Ejembi Unobe	Political Science	Political Science	B.Sc, M.Sc., PhD	Professor
John Gwangari	Nigerian Legal System	Civil Law Canon Law	B.Phil.; B.D. Rome STL; DCL. Rome L.L.B. Jos; B.L. Abuja	Professor
Victor Egwemi	Political Science	Political Science	B.Sc., M.Sc., ABU PhD. Usmanu Dan Fodio	Associate Professor
Basil A. Ekot	Political Theory/ African Studies	Political Theory & African Studies	B.Phil.; B.D. Rome M.Phil; Ph.D. Sydney	Senior Lecturer
Jooji Tyomlia Innocent	Public Policy	International Relations	B.D., M.Sc.; PhD	Senior Lecturer
Dominic Shimawua	Public Administration	Public Administration	M.Sc., MA, PhD	Senior Lecturer

Sunday Inyokwe Otinche	Public Administration	Public Administration & Public Policy	B.Sc. Unijos; M.Sc. PhD UniAbuja	Lecturer I
Emmanuel C. Okwara	International Affairs/Diplomacy	International Relations/Strategic Studies	B.Phil, B.D, M.Sc, PhD	Lecturer II
Philip T. Vande	Political Theory; Nigerian Government and Politics	Political Science	B.Sc, M.Sc., PGDE	Assistant Lecturer
Gabriel T. Akwen	International Relations & Strategic Studies	Political Science	B.Sc., M.Sc.	Assistant Lecturer
Terwase K. Kussah	Political Theory	Political Science	B.Sc., M.Sc.	Assistant Lecturer
Sunday Adejoh	International Relations	Political Science	B.Sc., M.Sc.	Assistant Lecturer
Rita Kubai Bako	Public Administration	Public Administration	B.A., MPA, ABU; M.DS, NDA	Assistant Lecturer

### First Semester Courses

S/N	Course Code	Course Title	Credit Units
1.	PSD 5111	Introduction to Political Science	3
2.	PSD 5121	Nigerian Constitutional Development	3
3.	PSD 5131	Organization of Government Citizen and the State	3
4.	PSD 5141	Introduction to Public Administration	3

5.	PSD 5151	Introduction to International Relations	3
6.	PSD 5161	Introduction to African Politics	3
7.	PSD 5171	Research Methodology	3
		Total	21

### Second Semester

S/N	Course Code	Course Title	Credit Units
1.	PSD 5182	Foundation of Political Economy	3
2.	PSD 5192	Nigerian Public Administration	3
3.	PSD 5102	Public Policy Analysis	3
4.	PSD 5112	Political Thought	3
5.	PSD 5122	Nigerian Government and Politics	3
6.	PSD 5132	Nigerian Foreign Policy	3
7.	PSD 5142	Political Parties and Pressure Groups	3
		Total	21

### Third Semester

S/N	Course Code	Course Title	Credit Units
1.	PSD 5152	Research Project	6

## COURSE DESCRIPTION

### FIRST SEMESTER

#### PSD 5111: Introduction to Political Science (3units)

This course introduces the students to the nature and meaning of politics, exposing the art and science of politics. It emphasizes the issues of political discourse and practice. It also introduces

and exposes the students to the language and basic concepts of politics. The methods and approaches to the study of politics will also be captured in the course.

**PSD 5121: Nigerian Constitutional Development (3units)**

The student is taken through the process of Nigerian Constitutional Development in a chronological and sequential order. In this course, emphasis is on colonization, Richards' Constitution, the Mcpherson Constitution, Lyttleton Constitution, the Independence Constitution, the Republican Constitution, the 1979 and the 1999 Constitutions.

**PSD 5131: Organisation of Government Citizen and the State (3units)**

The course deals with the various ways of organizing government into the Legislature, Executive and the Judiciary. It will also treat the theory of separation of powers. Forms and systems of government unitarism, Federalism, Confederalism, Presidentialism and Parliamentarianism will be covered. The relationship of the citizen to the state in terms of the duties and obligations of the citizen to the state, theories of the origin of the state, and the responsibility of the state to the citizen must also be investigated. Other areas to be covered include the basis of freedom, loyalty and Political obligation.

**PSD 5141: Introduction to Public Administration (3units)**

The course covers such areas like the rationale of Administrations, the ecology of administration, the politics of administration, theories of administration and the control elements of administrative law.

**PSD 5151: Introduction to International Relations (3units)**

The organization of international society, the theories of international relations, theory of coalition and alliances, Balance of power, International organizations and the theory and impact of the third world.

**PSD 5161: Introduction to African Politics (3units)**

The course focuses on the implantation of the of Africa via colonialism, nationalists demands for independence; post independence politics, especially the emergence of the one party state, the collapse of the immediate past independence regimes and the rise of military rule. The fresh waves of democratization in Africa from the 1990s to the present.



**PSD 5171: Research Methods (3units)**

The course introduces the students to the important aspects of any research/project finding, reporting and presenting. It will cover the general introduction to technical writing in the social and behavioural sciences.

**Second Semester****PSD 5182: Foundation of Political Economy (3units)**

The course helps the students to understand the nature and subject of Political Economy. This requires an examination of major concepts, history, orientations and contentions that are recurrent in the course. It will particularly cover contending issues like development and underdevelopment, this historical trend in global capitalism and an appreciation of the Marxian dialectics in Political Economy.

**PSD 5192: Nigerian Public Administration (3units)**

Ecology of Nigerian Public Administration, the civil service, field administration, public corporations, fiscal policies, decision-making and the politics of financial administration. The course will also examine the process of making and implementing public policy etc.

**PSD 5102: Public Policy Analysis (3units)**

The course will expose the students to the concepts and strategies of planning, programming and budgeting system. It will look at the major forces that determine public policy, including the role of the chief executive, legislature and bureaucracy. It will also treat other issues like allocating resources, social indicators, forecasting the future decision making, implementation and evaluation.

**PSD 5112: Political Thought (3units)**

The course will examine selected classical, medieval and modern political thinkers, with special emphasis on the germination and impact of their ideas. These theories begin with Plato to Karl Marx. It will also examine the various African political thinkers, especially the nationalists.

**PSD 5122: Nigerian Government and Politics (3units)**

The course exposes the students to the general politics, economic and social frameworks within which Nigerian politics and governmental institutions developed and functions. This will cover the pre-colonial, colonial and the post-colonial nature and character of the Nigerian state.

**PSD 5132: Nigerian Foreign Policy (3units)**

This course proposes to cover topics like the principles of Nigerian foreign policy, Nigeria's neighbours and wider African setting, the international environmental policy, processes and issues. It will also treat Nigeria in a changing and globalised international system.

**PSD 5142: Political Parties and Pressure Groups (3units)**

Political parties and Pressure Groups are the main currents which allow for participation and representation in a political system. This course will therefore seek to expose the students to Political parties and Pressure Groups and their role in the political process.

**Third Semester**

**PSD 5152: Research Project (6units)**