

STUDENTS' HANDBOOK

of Academic Programmes

2016

INTRODUCTION

The Department of Geology was established in 1976 to expose the students to all aspects of training in theoretical, practical and field geology. Geology as a discipline offers a lot of challenges to those undertaking University training in the field. This brochure is prepared to give adequate information to all students on career needs and opportunities open to a graduate geologist. Besides covering the traditional geology subjects, such as crystallography, mineralogy, petrology, paleontology and structural geology, adequate training is given on applied geology, especially petroleum Geology, Exploration Geophysics, Economic geology, geochemistry, Engineering Geology, Hydrogeology, Marine geology, Environmental Geology and Palynology. The brochure also exposes the student to important information culled from the current edition of the Statement of Academic Policies of the University, including course registration and grading systems and course outlines required of students in both undergraduate and graduate Programmes. In fact, this brochure should be every student's companion,

I have no doubt in my mind that, this brochure will go a long way in solving the initial problems encountered by our students, especially new students. Students are advised to always consult academic advisers in matters affecting their educational welfare in this University. Students are also advised in their own interest not to get involved in acts capable of ruining their academic pursuit in this University. Always adhere to instructions, rules and regulations of the University. On behalf of all staff of the Department, I congratulate all the first-year students and welcome all returning students for this academic year.

Prof. G. J. Udom Head of Department

Historical Background

The Department of Geology formally commenced in 1977 as one of the three major departments in the then School of Physical Sciences, with the other departments being Physics and Mathematics. On October 1st 1983, the three Schools of Biological, Chemical and Physical sciences were merged to form the Faculty of Science eight departments viz: Animal and Environmental biology, Biochemistry. with Geology. Mathematics/Computers science/Statistics, Microbiology, Pure and Industrial Chemistry, physics, Plant Science and Biotechnology. This Faculty of Science was elevated to the status of the College of Natural and Applied Science in December 2012, with three Faculties of Biological, Chemical and Physical Science and Information Technology. Geology Department is one of the four Departments in the Faculty of Physical Science and Information Technology, namely Computer Science, Geology, Physics and Mathematics and Statistics. The National Universities Commission prescribes Benchmark Minimum Academic Standards (BMAS) for both undergraduate and postgraduate Programmes in all Nigerian Universities and based on this, the Senate of the University approves the courses offered by each department. The Department of Geology offers both undergraduate training Programmes through teaching and research and renders professional support services to corporate bodies within and outside Nigeria. These courses are geared towards preparing and equipping the students wards a challenging and satisfying profession. At the end of the programme, graduates of our Programmes can look forward to getting a wide range of job opportunities in public and private sectors. The Department is endowed with high caliber of dedicated professionals, whose experiences cut across different endeavours of life. Their major objective is to impart knowledge to the students, making sure that the formative years are sound. The student is expected to avail himself/herself of such great opportunity of tapping from these great scholars to be able to form his/her own opinions concerning life. The department provides unique and conducive learning/research environment that enable the student to excel and mould himself/herself into maturity.

Awards

 In 2011/2012, the Department competitively bided for and won a \$90,000 award from Chevron Nigeria Limited to Investigate the Spatial/Temporal Porosity Variation in their OML 90 (Phase 1). Following the successful completion of the project and based on the quality of the work, the study was extended in 2012/2013 to cover OML 86/88 (Phase 2) at a value of \$200,000.

Other Industry-University projects executed in the past by the Department include

- 2. Produced Water Re-Injection for Shell Petroleum Development Company East
- 3. Drilling Waste Re-Injection for Shell Petroleum Development Company East.
- 4. IDRC Research Grant on Gully Erosion [1993]
- 5. World Bank Research Grant Award [1996]
- 6. NUC Research Grant Award [2000, 2001)

Professional activities of Geologists

Geology is the science that studies the earth's structure, its origin, evolution and the processes that have shaped it from inception till date. The geologist explores the Earth's interior and makes discoveries not only during expeditions to distant regions or "in the Field", but also in, laboratories located in villages and cities. It is the geologists that can decipher the language of solidified rocks and have insight into the modes of their origin, the physio geographical environments that dominated in these regions in the past. Advances in geology have allowed the geologist to correctly figure out the time and mode of origin of our planet as well as its location in space; to trace the evolution of its interior and surface, including its atmosphere, hydrosphere and biosphere; to disclose changes in the chemical and mineral compositions of the Earth' crust and the planet as a whole. This involves a constant monitoring through satellites. The work of professional geologist is endless. It is a mixture of activities that involve the process of observation, planning, analysis, calculation, interpretation and decision.

The major specialties in the Department of Geology (in alphabetical order) are;

Aerogeology/remote sensing

- Crystallography
- Economic Geology
- Engineering Geology
- Environmental Geology
- Geochemistry
- Geophysics
- Geostatistics
- Hydrogeology
- Marine Geology
- Mineralogy
- Mining Geology
- Paleontology/Palynology
- Petroleum Geology
- Petrology
- Physical Geology
- Reservoir Geology
- Sedimentology
- Stratigraphy
- Structural Geology

To specialize in any of these fields, one needs to obtain a formal training with a degree, postgraduate diploma, M.Sc., PhD or informal training/experience from several years of professional practice in the industry.

Professional Associations/Affiliations

The recent establishment of the Council for Mining Engineering and Geosciences (COMEG) makes it mandatory that upon completion of your study in the universities, you need to have an Affiliate certificate before you are recognized by COMEG to practice as a Geoscientist. The professional associations make room for undergraduate and graduate student membership before being a corporate member. The lists of popular associations in the country are.

- 1. Nigeria Mining and Geosciences Society (N.M.G.S)
- 2. Nigerian Association of Petroleum Explorationists (NAPE)
- 3. National Association of hydrogeologists (NAH)

Affiliate Association

- 1. American Association of Petroleum Geologist. (A.A.P.G.)
- 2. International Association of Sedimentologist (I.A.S)
- 3. International Association of Hydrogeologist (I.A.H)

The student is encouraged to register as a student member of these organizations. There are immense benefits associated with being a member. One is constant receipt of current journals/manuals from' them. These furnish the student with innovations and researches in different specialties in Geology.

Recent advances in geology should challenge the student to be working. Our recent, satellite launch into the orbit for monitoring of natural hazards, prediction of changes in the climate; the landing of the unmanned spacecraft Curiosity on Mars in 2012 by America for exploration mapping, and advances in crime detection (Forensic laboratories), involving geologists (Palynologist) should challenge you to work very hard.

STAFF OF THE DEPARTMENT

The department has twenty-eight staff, twelve technical staff and eleven administrative staff as listed below.

Academic Staff

E.G Akpokodje; B.Sc. (UI) M.Sc. (Ife), PhD (UNSN) Professor Engineering Geology & Environmental Geology)

J.O Etu- Efeotor; B.Sc. (Ife), MA (Harvard), PhD (Wales) (Professor of Sedimentology and Petroleum Geology)

N.F. Ukaigwe; B.Sc. (UI), PhD (Adelaide) (Professor, Geophysics)

M.I Odigi; B.Sc., M.Sc. (UI), Ph.D. (UPH) (Professor, Economic Geology & Petroleum Geology)

V.U. Ukaegbu; B.Sc. (UPH), M.Sc. (Jos), PhD (UPH) (Professor, Exploration Geology, Petrology & Geochemistry;)

A.C. Ibe; B.Sc. (Nig), Ph.D. (Lond), DIC (Imperial) Professor of Oceanography/Organic geochemistry (On sabbatical)

G.J. Udom; B.Sc., M.Sc., PhD (Calabar), (Professor, Hydrogeology)

F.T. Beka; B.Sc (UI), M.Sc., Ph.D. (Washington) (Senior Lecturer, Economic Geology & Petroleum Geology)

A.C. Tse; B.Sc. (ABU), M.Sc., PhD (UPH) (Senior Lecturer, Engineering Geology & Environmental Geology) and HOD

S.A Ugwu B.Sc., M.Sc., Ph.D. (UNN) (Senior Lecturer, Geophysics)

A. A. Obafemi, B.Sc. (ILLORIN), M.Sc. (LAGOS) M. Sc., Ph.D. (UPH), REM (USA) (Senior Lecturer, Cartography/Geoinformation and Environmental Management)

J.I. Nwosu, B.Sc., Ph.D. (Russia) (Senior Lecturer, Mining Engineering)

C. N. Ehirim, B. Sc (ABSU), M. Sc. (FUTO), Ph.D. (UPH) (Senior Lecturer, Geophysics)

M. I. Ngwueke, B. Sc. (ASUTECH), M. Sc., Ph.D. (UPH) (Senior Lecturer, Theoretical /Applied Geophysics)

C. N. Nwankwo, B. Sc. (IBADAN), M. Sc., Ph.D. (UPH) (Senior Lecturer, Geophysics)

G. Emujakporue, B. Tech. (FUTA), M. Sc., Ph.D. (UPH) (Senior Lecturer, Applied Geophysics)

N.E. Ekeocha, B.Sc., M.Sc. Ph.D. (UPH) (Senior Lecturer, Engineering Geology)

R. Bello, B. Sc. (UNIILLORIN), M. Sc. (UNIBEN), Ph.D. (ABEOKUTA) (Senior Lecturer, Applied Geophysics)

H.O. Nwankwoala B.Sc. (UPH), M.Phil. (RSUST), Ph.D. (UPH) (Senior Lecturer, Hydrogeology)

N. Egesi, B.Sc., M.Sc. (Jos), Ph.D. (UPH)

(Lecturer I, Structural Geology/Petrology & Geochemistry)

Kingsley Okengwu; B.Sc. (Calabar), M.Sc. Ph.D. (UPH) (Lecturer 1 Petroleum Geology/Sedimentology)

J.C Onwualu B.Sc. (Awka), M. Phil (RSUST) Ph.D. (UPH) (Lecturer I, Petrology & Geochemistry)

S. Abrakasa B.Sc. (Calabar), M.Sc., Ph.D. (Newcastle) (Lecturer I Organic Geochemistry)

A. O. Sofolabo, B.Sc., M.Sc. (UPH) (Lecturer I, Applied Geophysics)

L. Nwosu, B.Sc., M.Sc., PhD (UPH) (Lecturer I, Applied Geophysics)

E.A. Jones B.Sc., M.Sc., PhD (UPH) (Lecturer 1 Sedimentology)

F.D. Giadom B.Sc. (UPH) M.Phil. (UST) Ph.D. (UPH) (Lecturer II Environmental Geology/Hydrogeology)

R.U. Ideozu, B.Sc., M.Sc. PhD (UPH) Lecturer II Petroleum Geology / Sedimentology & Reservoir Geology

C. U. Ugwueze, B.Sc. (ESUT), M.Sc., PhD (UPH) Lecturer II Petroleum Geology

F. E. Nnenany, B. Eng. (UPH), M. Sc. (IMPERIAL LONDON) Lecturer II Soil Mechanics/Geotechnical Engineering

D.C. Okujagu, B.Sc., M.Sc. (UPH) Lecturer II Petroleum Geology

F.I. Nwokocha, B.Sc., M.Sc. (UPH) Lecturer II Petroleum Geology

C. C. Magbo, B. Eng. (Graduate Assistant)

D. A. Osayande, B.Sc., M.Sc. (UNIBEN) (Graduate Assistant)

E. Sam, B. Tech Geology/Mining (UPH) (Graduate Assistant)

Professor Enuvie G. Akpokodje E-mail: <u>enuvie.akpokodje@uniport.edu.ng</u> GSM 08033129414



Core research interest is the Niger Delta, including geotechnical properties of soils, groundwater resources, saltwater-freshwater interface, subsurface waste disposal, pollution, contaminated site characterisation, gully erosion and flooding. His administrative positions/appointments include: Managing Director CORDEC [1998 – 2005]; Member, Governing Council; Pioneer Director Centre for Water Resources Technology; Chairman University Committee on HSE&S, Pioneer Chairman Professional Ethics Committee [2002 – 2005], Editor-in-Chief Scientia Africana [2000 – 2010], Pioneer Director, Institute of Natural Resources Environment and Sustainable Development (INRES) and Chair Occupant, Stanley Lawson Chair of Environmental Geology (2012 - 2016)

Professor John O. Etu-Efeotor Ph.D.



Professor of Sedimentology and Petroleum Geology.

He was the first Head of Department. He has conducted a lot of research on water supply and quality problems in difficult terrains, Sedimentology and Petroleum Geology of Irish Sea and Niger Delta Basins. He loves teaching Petroleum Geology at all levels. He is now the Director of the Centre for Petroleum Geosciences (CPG) of the Institute of Petroleum Studies (IPS) at the University of Port Harcourt. He has also been the Pioneer Dean, College of Science, Federal University of Petroleum Resources, FUPRE, Warri; Ag Dean College of Technology [Engineering] FUPRE, Warri; Coordinator Geology Programme, SITP Warri; Coordinator Geology Programme, IPS since inception. He was a one time the Vice Chancellor, Federal University of

Petroleum Resources, Warri.

Professor Nnaemeka Francis Ukaigwe (JP) B.Sc. (Ibadan), Ph.D. (Adelaide) <u>ukaigwe@yahoo.co.uk</u> GSM: 08037105382



He coordinates /exploration /geophysics programme at the Department of Geology, University of Port Harcourt. He combines an academic background in geology and geophysics with experience in mineral exploration and near surface geophysics. He specializes in applying airborne and borehole geophysical methods to geological, hydro-geological, environmental and engineering problems with emphasis on solid mineral and oil related explorations. He has served as principal investigator in 20 studies funded by state, Federal, regional agencies and industry groups and has published more than 40 articles, 9 books and 5 chapters in books including the only text books now in use in teaching of geophysics in Nigerian Universities.

He has the fortunate experience of providing consulting services for numerous environmental and engineering projects in the Niger Delta region. In the area of community development, he has played important roles in matters of importance to Nkwerre, his home Town, Orlu his Senatorial district and Imo state in general. He is listed as No. 20 in who is who in Imo State which is published in the Imo website. During his 23 years in the University, his responsibilities have been broad including technical, programmatic and regulatory arena. He has pursued a dual role of both management and technical research and development Programmes. He is a certified professional Exploration Geophysicist in Nigeria. His administrative positions/appointments include University of Port Harcourt Coordinator, EEC-FGN Coastal Erosion Research Project (1988 – 1992); Chairman Boarding of University vehicles (1992); Member University Certificate Verification Committee [1988-1989]; Chairman Catholic Chaplaincy Council (1992-1996); Publicity Secretary Academic Staff Union of University of Port Harcourt Chapter (1988)



Professor Minapuye Isaac Odigi E-mail: <u>minapuye.odigi@uniport.edu.ng</u>. GSM +234(0)8035520157

linap ye I. Odigi is currently a professor of Geology and the occupant of O.B. Lulu-Briggs Chair in Petroleum Geosciences, Institute of Petroleum Studies, University of Port Harcourt. He graduated from the University of Ibadan, Nigeria in Geology in 1974and received an M.Sc. in Mineral Exploration in 1981. He has worked with the Nigerian geological Survey Agency and has undertaken field oriented exploration and production project studies in Books Cliff USA sponsored by Shell Nigeria. His research interest includes Mesozoic and Cenozoic Basins of West

Africa Region, with emphasis on problems associated with Sedimentology, Stratigraphy and Petroleum

Geology/Mineral deposits. He was the pioneer Director Centre for Petroleum geosciences. At present, he is the chair occupant, Lulu Briggs Chair of Petroleum Geoscience

Prof. Victor Uchechi Ukaegbu E-mail: <u>victor.ukaegbu@uniport.edu.ng</u> GSM 08037025850

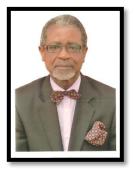


His research interests are the geochemical compositions and behaviors in igneous and metamorphic rocks, the trace and rear earth elements characteristics during magma evolution and crystallization, their distribution patterns in igneous rocks, and impacts on environment. Thus, the thrust of my current research activities is captured as follows:

- Trace and rear earth geochemistry, including petrogenesis and geotectonic setting of basement rocks of Nigeria, and the Benue Trough.
- Trace elements and cardiovascular diseases
- Impacts of trace elements concentrations on general health
- Mineral exploration with particular interest in rear earth metals and gemstones
- Petrology of undifferentiated basement rocks of Nigeria

He is the Pioneer Dean of the Faculty of Physical Science and Information Technology created in 2013.

Prof. A. Chidi Ibe E-mail: ibechidi@yahoo.com GSM 08060485979



He is a visiting Professor of Oceanography and NUC distinguished Scholar in the Diaspora. With academic and professional qualifications in Geology, Engineering, chemistry and Oceanography including a 1980 Ph.D. and DIC from the Royal School of Mines, Imperial College of Science and Technology, United Kingdom, he has pursued a varied but illuminating career as Petroleum engineer, Reservoir/Production geologist, Research geochemist, University teacher, author, editor, United Nations Technocrat and International diplomat. In between, he has published, singly or jointly 18 books, over 100 technical papers and about 45 top flight consultancy reports for the private sector, united nations agencies, and governments. Prior to embarking on graduate studies, he had worked for Shell-BP

Petroleum Development Co (Nig) Ltd and was elected to membership of the American Society of Petroleum Engineers of AIME in 1977. His current research interest includes petroleum formation and accumulation, reservoir/production geology, climate change dynamics as well as the effects of subsidence and sea level rise on sustainability in coastal areas.

Prof. Godwin J. Udom E-mail goddyudom@yahoo.com GSM: 07082403050



Nationality: Nigerian

• Qualification: B.Sc. Geology, M.Sc. Geology (Hydrogeology), Ph.D. Hydrogeology/Engineering Geology. He joined the services of the University of Port Harcourt in 1991 and rose to the rank of Professor. He was Head of Department, Geology between 2007 to 2010, Coordinator, Geology and Mining Technology Option, School of Science Laboratory Technology 2010 – 2014, He is currently the Head of Department. His areas of specialization are Hydrogeology and Engineering Geology. His Research Interests include groundwater chemistry, Impact of climate change on ground water system, aquifer delineation using geophysics, soil mechanics and foundation, environmental Impact Assessment (Hydrogeologic aspects). He has about 40 publications in local and International Journals. His Area

of Consultancy: Hydrogeology, geophysics, engineering geology and EIA. Has served the university in many capacities such as Head Department of Geology, Coordinator SSLT, Chairman Task force on Renovation of Staff houses etc. His professional affiliation include membership of NMGS, IAH, IASTG, NAH, COMEG

Francis Thomas Beka E-mail: francis.beka@uniport.edu.ng GSM: 08023014728



His research areas cover Petroleum and Structural Geology, and environmental systems. He has extensive research and administrative experience from the research and Development Division of NNPC and Federal Ministry of Environment, where he worked for several years before joining the Geology Department of the University of Port Harcourt. He is presently Assistant director of the Centre for Petroleum Geosciences, Institute of Petroleum Studies, University of Port Harcourt.

Akaha Celestine Tse (Ph. D), E-mail: akaha.tse@uniport.edu.ng or akacelts@yahoo.com GSM: +234 (0) 8055364149



He earned a B.Sc. degree in Applied Geology from Abubakar Tafawa Balewa College (now ATBU, Bauchi) of Ahmadu Bello University, and higher degrees (M.Sc. and Ph.D.) from the University of Port Harcourt. His research interests are in Engineering and Environmental Geology with emphasis on subsurface soil studies for foundation purposes, groundwater development, Impact assessment of solid waste disposal and hydrocarbon impacted sites. Research on potentials of subsurface formations for carbon geosequestration and storage of wastes is also stimulating his attention. He was the Head of Department 2010 - 2015.

Sylvester A. Ugwu (Ph.D) E-mail: ugwusa@yahoo.com GSM: 08037441914



He holds B.Sc., M.Sc., Ph.D. from the University of Nigeria Nsukka. At present, he is a Senior Lecturer in Geophysics. Current research interest is in seismicity of the African lithosphere.

Dr. Nwosu Joseph Ifeanyi (Ph. D) geomines2006@yahoo.com GSM: 08034734902



open pit parameters.

Studied in Peoples Friendship University, Moscow where he obtained a Continuous M.Sc. degree in Mining Engineering in 1989. He proceeded to obtain a Ph.D. in the same field in 1994 from St. Petersburg Mining Institute (Technical) University, Russia. After his studies, he was employed at the National Iron Ore Mining Company Itakpe where he headed Mine/Planning and Design Division from 1996-2006. His areas of specialization are Open Pit Mine planning and design, Mineral property evaluation and investment decision making in the mineral industry. Currently he is researching in optimizing the basic parameters of open-pit mines and stochastic modelling of

Nnamdi Enyereibe Ekeocha (Ph. D) GSM: 08035667605 Email:



namdi.ekeocha@uniport.edu.ng

Dr. Ekeocha holds B.Sc. (Hons. 1992) in Geology, M. Sc. (1998) in Geology with specialization in Engineering Geology/Hydrogeology and PhD in Engineering Geology [2012] all from the University of Port Harcourt. He has published research articles in both local and international journals. His areas of research interests include the properties of clays within the Lower Benue Trough with a view to establishing their potentials and specific roles in road failures within the region, the properties of soils for engineering purposes especially for foundation and road construction, surface/ground water studies and the sustainability of the environment. Dr. Ekeocha is a seasoned environmental practitioner and is a corporate member of Nigerian Mining and Geosciences

Society (NMGS), Nigerian Association of Hydrogeologists (NAH), National Registry of Environmental Practitioners (RES) USA and a certified member of Council of Nigerian Mining Engineers & Geoscientists (COMEG).



Nwankwoala,HyacinthOgunka(Ph.D)nwankwoala_h.o@yahoo.comGSM 08036723009

Nwankwoala holds a B.Sc. (Hons) Degree in Geology from the University of Port Harcourt and an M.Phil. Degree in Environmental Management (Environmental Geosciences option) from the Rivers State University of Science and Technology, Port Harcourt, and PhD in Hydrogeology from the University of Port Harcourt. His research works adopt a holistic approach to unravel 'the big picture' of hydro-geological and geo-environmental conditions. His interests are broad based and have ranged widely over the hydro-geological spectrum,

(including but not limited to forensic geosciences, applied hydro-geophysics, applied hydrogeology, environmental geophysics, marine/offshore geophysics, environmental geo-techniques, fluvial geomorphology, oceanography, environmental impact assessment, waste management, water resources planning/management, water quality management, eco-hydrology, biogeochemistry, geo-microbiology, environmental geochemistry, contaminant hydrogeology, environmental hydrogeology, with special emphasis to hydrogeochemistry, groundwater modeling/unsaturated zone studies, geochemical modeling and pollution studies, hydrogeochemical processes, solute transport, medical geology etc.) but with special interest in the impacts of human activities on the quantity and quality of groundwater resources. In the process, he has produced significant results.

Ndukauba Egesi (Ph. D) E-mail ndukauba.egesi@uniport.edu.ng GSM 08036721760



Mr. N. Egesi holds an M. Sc Degree in Mineral Exploration and Mining Geology (Structural Geology/Geophysics Option) from the University of Jos, Nigeria, Ph.D. Degree in Petrology/Geochemistry from University of Port Harcourt. His major interest is in Geochemistry, Structural Studies and Field Geology.

Mrs. Onwualu Josephine N. (Ph. D) john_onwualu@yahoo.com GSM: 0803488952



Petrologist and Geochemist. Her on going Ph.D. research is on the petrology and geochemistry of magmatic rocks. She has interest in petrogenesis /geotectonics, geochemical distribution, inorganic geochemical exploration, waste management, environmental Impact Assessment, Pollution control, the application of geochemistry to health, safety and environment.



Kingsley Okengwu (Ph. D) 08036671300

kingsley.okengwu@uniport.edu GSM:

His areas of specialization is Petroleum Geology/Sedimentology His ongoing Ph.D. research focuses on Stratigraphy and Geochemistry of Pyroclastic rocks in the Lower Benue Trough. Other interests are in Geochemistry and Petroleum Potentials of Source rocks in the Anambra and Afikpo Basin and Hydro-geochemical implications of some rocks in the Anambra and Afikpo Basin.

Selegha ABRAKASA (Ph. D) Email: <u>sabrakasa@hotmail.com</u>, Phone: 08021062062



He obtained. BSc in Chemistry for University of Calabar, and M.Sc and PhD in Petroleum Geochemistry from Newcastle University, United Kingdom., His areas of interest are Petroleum Systems Modelling, Petrophysics of cap rock, reservoir-cap rock, oil-oil, & oilsource correlation studies based on molecular geochemistry, gas geochemistry and isotope geochemistry, Oil spill assessment, Modelling EOR flooding. He is a Fellow of the Geological Society of London.

Acra Edward Jones (Ph. D) E-mail: warejones16@yahoo.com GSM 08063888274



He obtained B.Sc. degree in Geology from the University of Port Harcourt and M.Sc. from the same department. He has just defended his Ph.D. dissertation. His research interest includes: sedimentology, reservoir geology, field geology, sedimentary basin evaluation, structural analysis, petroleum systems analysis, marine geology.

Dr. Giadom, Ferdinand Dumbari E-mail: freddiegiadom@yahoo.com GSM 08063300951



Dumbari has a doctorate degree in Environmental Geology from the University of Port Harcourt. He loves teaching Environmental Geology, Contaminant Hydrogeology, Global Tectonics and Marine Geology. He has over the years been involved in the audit and characterization of contaminated lands and aquatic environments.

Baseline studies of greenfields and the Assessment and Remediation/Restoration of brownfields are his specialties. He has particular interest in the evaluation and modeling of contaminant transport in polluted ecosystems and is very experienced in the Monitoring and Evaluation of the Recovery of impacted Biomes (particularly wetlands) resulting from anthropogenic activities or from natural disasters, such as hydrocarbon contamination, floods, etc. He has worked with the United Nations Environment Programme (UNEP) as a Senior Technical Expert on the Environmental Assessment of Ogoniland in Rivers State, Nigeria. Ferdinand is of the Catholic faith and a devotee of the Blessed Virgin Mary.

Ideozu, Richmond. U. (Ph.D) E-mail: richmond.ideozu@uniport.edu.ng GSM: 07068558546



Dr. Ideozu, is a geoscientist, not afraid of hard work, goal oriented, a team player, excellent interpersonal relationship, dedicated and committed to work. Ability to adapt very fast, to new and challenging environments He started his academic training at the University of Port Harcourt. where he obtained his B.Sc. degree in Geology, Master of Science (M.Sc.) in Geology majoring in Petroleum Geology / Exploration Geophysics and Ph.D. in Petroleum Geology. He joined the services of the University of Port Harcourt as an Assistant Lecturer in 2010 - 2013, Lecturer II in 2013 – 2016. His area of specialization is Petroleum Geology / Sedimentology and much of his academic carrier and professional experience is centered on sedimentology and petroleum geology. Research interests include biostratigraphy (Micropaleontology and Palynology), petroleum geochemistry, clay mineralogy and structural geology. He has publications in local and internal journals – fourteen to his credit. He was Postgraduate Coordinator for six years, Transcript officer 2010 -Date and currently Chairman TLP NMGS Port Harcourt Chapter. Member, AAPG, NMGS, COMEG, NAPE and NAH

Ugwueze Charles U. (Ph.D). GSM: 08035632241 Email: charles.ugwueze@uniport.edu.ng



He started his academic training in Geology at the Enugu State University of Science & Technology, Enugu from 1998 – 2002, obtained a Bachelor of Science in Geology & Mining. In 2009, he obtained a Master of Science (M.Sc.) in Geology, majoring in Petroleum Geology from the University of Port Harcourt. In 2010, he joined the University of Port Harcourt as an Assistant Lecturer.

His area of specialization is on the integration of sedimentology and ichnology in reservoir evaluation, specifically on the prediction of spatial and temporal distribution of reservoir quality/heterogeneity away from well-control. While much of his academic career and professional experience has centered on the field of sedimentology and petroleum geology, he also has a wide range of interests in biostratigraphy and mineral

resources, as well as the scholarship of teaching and learning. In his short career, he has supervised over eighteen undergraduate students. He is versed in the use of geological software's viz: Petrel, Surfer8, Interactive Petrophysics, OpendTect, ArcGIS, WellCAD etc. He has served or is still serving in various University Committees. He is currently a PhD research intern with Shell Petroleum Development Company (SPDC) Port Harcourt. He loves playing football, reading, and watching films.



Mr. Diepiriye C. Okujagu: <u>diepiriye.okujagu@uniport.edu.ng</u> GSM 08033099999

He started his academic training in Geology at the University of Port Harcourt, Choba, from 2000 – 2005 and obtained a Bachelor's of Science (B.Sc.) degree in Geology. In 2011, he obtained a Master of Science (M.Sc.) degree in Geology, majoring in Petroleum Geology from the University of Port Harcourt. In 2010, he joined the University of Port Harcourt as a Graduate Assistant. His area of research training/interest include; Structural Geology using Integrated Remote Sensing and GIS Technology, Non-Seismic Coastal Subsidence and Erosion, Sedimentology, Petroleum Geology,

Marine Geology/Oceanography, Tidal Morphology studies, Hydro-chemistry, Geotourism/Ecotourism, Environmental Sustainability, and Medical Geology. He has certifications in Associate Environmental Professional (AEP), Health, Safety and Environmental Management System (HSE-MS), and OpendTec

Mrs. F.I. Nwokocha E-mail yoursfin@yahoo.com GSM: 08063353548



She started her academic career in Geology at the Department of Geology, University of Port Harcourt Nigeria in 2002, earning a Bachelor of Science Honours degree in Geology in 2006 and a Master of Science (M.Sc.) degree in Sedimentology and Reservoir Geology from the same University in 2012.She has worked as an M.Sc. research intern in the Exploration Department with Shell Petroleum and Development Company and joined the University in 2014 as an Assistant Lecturer. Her research interests include Petroleum Geology, Sedimentology and Reservoir Geology and Basin Modeling. She is proficient in the use of geologic software such as PETREL, OpenDTech, Cauldron and Petromod.

Other persons who have served as academic staff of the department in the past include:

- 1. Dr. Ebukason (died 1984)
- 2. Dr. Isaac Perry Okonny (died 2006)
- 3. Dr. Promise Abi-Bezam Amadi (died in 2010)
- 4. Dr. Olorunfemi
- 5. Dr. F.A. Ushie
- 6. Prof. L. C. Amajor (died 2016)
- 7. Dr. I. N. Oloto (died 2015)

PAST HEADS OF DEPARTMENT

The following academic staff have served as Head, at various times in the department.

S/N	Period	Name	Designation
1.	1977-1979	Dr. Michalski	Director of Geology Programme
2.	1980-1982	Dr. J. O. Etu-Efeotor	Pioneer Acting HOD
3.	1983-1985	Dr. M.N. Oti	Acting HOD
4.	1986-1987	Dr. E. G. Akpokodje	Acting HOD
5.	1987-1989	Dr. L. C. Amajor	Acting HOD
6.	1990-1992	Dr. I. P. Okonny [Late]	Acting HOD
7.	1992-1994	Mr. M. I. Odigi	Acting HOD
8.	1994 -1996	Dr. (Mrs.). I. N. Oloto	Acting HOD
9.	1996-1998	Prof. E.G. Akpokodje	HOD
10.	1998-2000	Dr. J. O. Etu-Efeotor	Acting HOD
11.	2000-2001	Prof. M. N. Oti	HOD
12.	2001-2003	Mr. M. I. Odigi	Acting HOD
13.	2003-2004	Dr. V. U. Ukaegbu	Coordinator
14.	2004-2007	Dr. V. U. Ukaegbu	Acting HOD
15.	2007-2010	Dr. G. J. Udom	Acting HOD
16.	2010-2011	Dr. A. C. Tse	Coordinator
17.	2011-2013	Dr. A. C. Tse	Acting HOD
18.	2013-2015	Dr. A.C. Tse	Acting HOD
19.	2015 - Date	Prof. G. J. Udom	HOD

Laboratory Staff

S/N	Name	Designation	
1	Nwogu, Christopher O (Mr.)	Assistant Chief Technologist	
2	Kamalo Okanje Barnabas (Mr.)	Principal Technologist	
3	Wordu, Kingsley (Mr.)	Senior Technologist	
4	Igbani, Victoria S. (Miss)	Senior Technologist	
5	Ndinuojuo Ben-Collins Emeka	Technologist II	
	(Mr.)		
6	Ukonu Onyinyechi Faith (Mrs)	Technologist II	
7	Agwu Margaret (Miss)	Technologist II	
8	Digbani, Festus Tubo (Mr.)	Senior Assistant Technologist	
9	Chukwu, Ebenezer (Mr.)	Senior Assistant Technologist	
10	Itode, A. Moris (Mr.)	Senior Assistant Technologist	
11	Bune Chinyere Phoebe (Miss)	Laboratory Assistant	
12	Amadi Philomina Eze (Mrs)	Laboratory Assistant	
13	Okorogba Gloria	Laboratory Assistant	
14	Ogbonna Vincent Anaboro (Mr.)	Head Lab Attendant	
15	Nwobueze Azubuike (Mr.)	Laboratory Assistant	
16	Ihunda Osoruchi Faith (Mrs)	Head Lab Attendant	
17	James Peace Samuel (Mrs)	Head Lab Attendant	
18	Akani Elizabeth (Mrs)	Head Lab Attendant	

Administrative Staff

S/N	Name	Designation
1	Mpi, Ndidi Felicia	Assistant Registrar
1	Obi Patience (Mrs)	Personnel Secretary II
3	Ordu Gladys	Clerical Officer 1
4	Ononiwu, Richard N. (Mr.)	Computer Operator
5	Amadi, Stella N (Mrs)	Caretaker
6	Worlu Florence (Mrs)	Cleaner / Messenger

7	Wachukwu Precious (Miss)	Cleaner / Messenger
---	--------------------------	---------------------

PHILOSOPHY, AIM AND OBJECTIVES

The philosophy of the department is to ensure that our students and graduates have a clear knowledge and understanding of the role and importance of geology in the society, since the foundation of the earth and all resources therein are found on or in the earth.

The main aim and objectives of the degree programme in geology are:

- a. To instill in students a sense of enthusiasm for geology, an appreciation of its application and relevance in the solution of different societal development problems, and to involve them in an intellectually stimulating and satisfying experience of learning and studying.
- b. To provide student with a broad and balance foundation of geology knowledge and practical skills.
- c. To develop in students the ability to apply their geological knowledge and skills to the solution of theoretical and practical problems in geology.
- d. To develop in students, a range of transferable skills and attitudes that are of value in geological and non-geological employment.
- e. To provide students with a knowledge and skills base from which they can proceed to further in specialized areas of geology or multi-disciplinary areas involving geology.
- f. To generate in students an appreciation of the importance of geology in an industrial, economic, environmental, technology and social development.
- g. To expose students to new developments and advances in technology, policy and process; and new concepts and practices in education for sustainable development

LEARNING OUTCOMES

a. Regime of subject knowledge

The content, nature and organization of courses in the department are designed to ensure that students become conversant with the following main aspects of geology.

- a. Major aspects of geological terminology, nomenclature, conventions, units and a sound understanding of the fundamental concepts in geology.
- b. The major groups of rocks and their characteristic features
- c. Earth history and the concept of time in geology
- d. Physical geology and the practical identification of common rock forming minerals and fossils.
- e. Crystallography, mineralogy and the principles and procedures of identifying minerals using the polarizing microscope.
- f. Principles and techniques of field geology and the interpretation of topographic and geologic maps.
- g. Systematic paleontology covering the morphology, evolution, identification of major animal phyla including their stratigraphic and paleoecology distributions.
- h. The morphology and classification of pollens and spores and their applications in stratigraphic and paleo environmental studies
- i. The characteristics of igneous and metamorphic rock and the geological processes which gave rise to them
- j. The characteristics features of sedimentary rocks including their structure and composition and the recognition of sedimentary environments from the rock records
- k. The principles and concepts of stratigraphy and their application in sedimentary basin analysis
- 1. The principles and processes of formation of mineral deposits and techniques for their evaluation.
- m. Petroleum geology and the nature of source and reservoir rocks and hydrocarbon traps and evaluation of petroleum potential of a sedimentary basin
- n. Applications of the physical and chemical properties of rocks in the design of exploration techniques in the search for groundwater, mineral deposits, hydrocarbon and engineering foundation studies.
- o. An appreciation of the value of fieldwork in geology, which is practicalized by field training Programmes and skills acquisition through industrial attachment
- p. Awareness of major issues currently at the frontiers of geological research and development.

b. Competencies and skills

Our undergraduate students are trained to develop a wide range of different abilities and skills. These are divided into three broad categories as follows:

- Geology-related cognitive abilities
- Geology-related cognitive skills
- Geology-related practical skills

ATTAINMENT LEVEL

Graduates of our undergraduate programme are trained to have the ability to apply knowledge and skills to solving theoretical and practical problems in the exploration and exploitation of natural earth resources and also be able to carry out research in Geosciences.

AVAILABLE RESOURCES FOR TEACHING AND LEARNING

- a) Academic and non-Academic Staff
- b) Laboratories and Class Rooms
- c) Workstation
- d) Academic and Administrative Equipment
- e) Library and Information Resources

PROSPECTS OF THE DEPARTMENT

There are opportunities to work in the following sectors of the economy:

- Petroleum Industry
- Solid mineral sector
- Water drilling companies/agencies
- Government agencies/parastatals
- Education
- Agriculture
- Communication
- There is an increasing awareness in the protection of the environment and this has also created more employment opportunities in the environmental sector.
- Construction
- Banking

Recently, government evolved policies to develop other non-oil and gas sectors. This has widened opportunities for graduates to secure jobs in these sectors. The major players in the provision of jobs to our graduates have been the multinational and indigenous oil and gas companies. These are Shell. Agip, Chevron. Texaco Overseas, Total, etc. These companies support the oil servicing companies such as Schlumberger Group, Halliburton, Geoservices, Addax, etc. in providing jobs. With the new government policy on the solid minerals development, employment opportunities in this sector have emerged. However, a geology graduate is trained in the University of Port Harcourt to be independent in the face of unemployment; he can be creative. A lot of graduates are in the provision of potable water to individuals and communities. The water industry is fast growing absorbing all manner of graduates in this field. The world is now a global village. A lot of employment opportunities also abound in the Internet, affording our graduates opportunities to compete with the outside world. Despite the world economic recession, geologists are still in great demand.

ADMISSION REQUIREMENTS/STRUCTURE OF PROGRAMME

UNDERGRADUATE (B.Sc.)

Admission Requirement

The basic admission requirements of the university are:

- 1. Five credits in the Senior Secondary Certificate, West African School Certificate/General Certificate of Education/NECO/ in English Language, Mathematics, Physics and Chemistry and Biology obtained at not more than two sittings. There is no admission by direct entry into the second year of the degree programme.
- (i) A score in the Unified Tertiary Matriculation Examination (UTME) conducted by the Joint Admission and Matriculation Board, not below the national minimum cut-off point for the particular year in question. The UTME subjects are English Language, Mathematics, Physics and Chemistry.
 (ii) A score in the Post-UTME Screening Exercise conducted by the University not below the JAMB national minimum

or

Acceptable score in the Pre-degree (Basic) programme in addition to a score in the current UTME not below JAMB national minimum cut-off point for the particular year in question

Mode of Study

The mode of study for the B.Sc. Geology programme is Full time

Options in the Programme / Areas of Specialization

cut-off for the particular year in question.

We do not run options at the undergraduate level, thus we graduate our students with B.Sc. Geology at the end of the study.

Duration of Study

Four years minimum to six years maximum

Course Content / Framework for Degree Structure

The general framework for the degree structure is as follows: 1st Year C 2nd Year Foundation Courses Major Courses Community Service course

3 rd Year 1 General Studies Course Major Courses Industrial Training	4 th Year 1 General Studies Course Major Courses 1 Seminar Course 1 Project Course
5 th Year	6 th Year

5 th Year	6 th Year
All Carry Over Courses	All Carry Over Courses

GUIDELINES AND INSTRUCTION.

- For purposes of teaching and examination, the academic year is divided into two semesters, each of approximately sixteen weeks of teaching.
- Instruction shall be by courses, by the respective course lecturers, tutorial instructors and laboratory attendants.
- The unit of credit for a course is the credit unit, one credit unit being when a class meets for one hour every week for one semester in a lecture or tutorial, or for 3 hours every week in practicals in the laboratory, workshop or field.
- Each course carries 1 to 6 credit units and its duration is normally one semester.
- The normal course load for a full-time student is 15 to 24 credit units per semester. No student is permitted to register for less than 15 or more than 24 credit units in any semester.
- Every course shall be continuously assessed, and examined at the end of the semester in which it is given.
- **Re-sit of examinations** are not permitted. The student is to carry over the course to the next appropriate semester with exception of year three (3) Second semester which is meant for the students Industrial Training only. Any examinations taken during this time by any student is null and void and such results will not be used by the department and the student will carry over the course at the appropriate semester.
- Students are required to obtain a minimum of 75% attendance at lectures/tutorials and or laboratory/practicals to be eligible for examination in the courses.

Graduation Requirements

- **Students will normally graduate** on the programme in the Department at the time they were admitted into the Department, except Senate directs otherwise.
- The pass mark for all courses is 40%, however, as from the 2013/2014 academic session, pass mark shall be 45%
- When re-registering failed courses, students must not exceed the maximum number of 24 credit units for one semester. Any course(s) which would cause the maximum to be exceeded must be deferred to the following academic year.
- Students are not allowed to repeat a course which they have passed
- It is mandatory that a student presents and defends his/her project to earn a degree.
- Students shall be allowed to graduate with a maximum of any two (2) failed courses, provided these are not Research Projects, Student Industrial Work Experience Scheme (SIWES), GES Courses, Field work Courses, Seminar and Community Service Course as they cannot be waived, after completing the approved programme of study in the department, and after having attempted all courses which the programme specifies between 4 years minimum to 6 years maximum.
- **Pass grade(s)** shall replace **fail grade(s)** and the pass grade(s) shall be used to compute the CGPA. The maximum grade to be earned in respect of replacement of fail grade with a Pass grade is "C"
- A total number of 141 units shall be used in the computation of a student's degree result at the completion of his/her study.

REGISTRATION

REGISTRATION OF COURSES

- The period for normal registration is the first three weeks of each academic year, excluding the orientation week.
- The period for late registration is the fourth and fifth weeks of the first semester of the academic year. Late registration will attract a surcharge.
- The Head of Department/Academic Adviser will guide the student on the courses to register.
- Students are to re-register all previously failed courses in, before any other course for the semester and the total credit units registered should not be less than 15 nor more than 24 per semester.
- The final Registration of courses is online, thereafter; the student should submit a copy of his/her Course Registration Print-out to his/her Head of Department.
- Any student who fails to pay his/her school charges and registers his/her courses online in a session loses his/her studentship for that session.

- Students are not allowed to sit for examinations in courses for which they have not previously registered. Such actions are fraudulent and culprits will be appropriately disciplined.
- Only results of bona-fide students (that is those who have paid their school charges and registered their courses online will be published online).
- A list of students registered for each course will be displayed for one week immediately after the close of registration for necessary corrections, after which the list becomes the authentic register for the course examination.
- Students are encouraged to join the departmental, ethnic, social, religious and any relevant academic associations, and be active and pay the dues for such associations which has no relationship at all with departmental or faculty or course registration.
- Application for adding or dropping a course must be made on the prescribed ADD/DROP Form after obtaining the approval of the Head of Department, not later than four weeks before the examination in each semester. Any change of course made by altering the hard copy of the course registration form will be null and void. Ask for the form from the faculty officer's office.

AUDITING OF COURSES

Students may attend a course outside the department. The course shall be recorded in their transcript only if they have registered and requested for it with the approval of the Head of their Department and the Dean of the Faculty and has taken the prescribed examination. An audited course shall not be used in calculating the CGPA.

ACADEMIC ADVISERS

Every student is attached to an Academic Adviser who is a member of the academic staff and who will advise him/her on academic affairs as well as on personal matters. Academic Advisers will follow the students' academic progress and provide counseling to them.

CHANGE OF DEGREE PROGRAMME

A Student who has been admitted to a degree programme on satisfying the minimum requirements for entry into the University as well as course requirements for the Faculty and Department shall not normally be allowed to change until he/she has completed the first academic year in the degree programme. A student awarded a scholarship in a discipline different from that for which he/she is admitted shall be allowed to change Faculty or department to that in which the programme specified by the Scholarship Award is available, provided that he/she meets the requirements of the Faculty or Department to which a change is desired.

Inter-Faculty Transfer:

Application to change Faculty shall normally be made by the student concerned through the purchase of the form from Admissions office in the 2nd semester proceeding the year of transfer. The Form shall be filled by the student, the HOD and Dean of the present Department/Faculty and thereafter processed by the Department and Faculty to receive the student not later than 6 weeks of the 1st semester of the year of transfer. The recommendation from the Faculty Board of the Faculty to receive the student shall be forwarded to the Committee of Provost and Deans (CPD) for approval. Thereafter, a letter of approval to transfer shall be issued by the Admissions Officer to the student before actual transfer takes place. Any student who transfers before approval by CPD. Shall be deregistered from the University for irregular transfer. For the purpose of transfer, the O-Level and UTME subjects must be relevant to the new programme.

To qualify for transfer into the professional Programmes like Medicine, Dentistry, Nursing, Pharmaceutical Sciences Engineering and Management Sciences, from geology department: the student shall be required to have CGPA of 4 points or above at the time of application. For a student to qualify for transfer into other faculties, he/she requires a CGPA of 3.0 points at the time of application.

Intra-Faculty Transfer: This is transfer within the same Faculty. Intra Faculty Transfer is done by the Faculty Board and the Committee of Provost and Deans informed. To qualify for Intra-Faculty Transfer, students shall be required to have a minimum of the continuation CGPA of 1 point.

Students cannot transfer from Medicine, Dentistry, Nursing and Pharmaceutical Science and any other department to geology.

INTER-UNIVERSITY TRANSFER

A student from another University may seek a transfer to any of the Programmes of the University of Port Harcourt. Such applicants shall purchase a Form from Admissions Office on payment of one hundred thousand naira (N100,000) Naira (subject to reviews) at the Bursary Department. The form shall be duly filled by the applicant requesting his/her present University to forward his/her transcript of academic record to the Registrar. The Registrar shall refer the request to the appropriate Head of Department after the transcript has been authenticated for consideration by the Departmental Board. The Departmental Board after considering the application shall make an appropriate recommendation to the Faculty Board which will in turn recommend to the Committee of Provost and Deans (CPD) for approval. Thereafter, a letter of approval to transfer shall be issued by the Admissions Officer to the student before actual transfer. All such applications must be processed before the beginning of an academic year. Irregular transfer is not allowed.

- The O-Level and UTME subject must be relevant. The applicant must have the required CGPA of 3 point.
 - All applicants for Inter-University transfer shall be required to be in good standing in their previous Universities.
- A student who has been expelled or suspended from any University for acts of misconduct is not be eligible for transfer to the Department of Geology, University of Port Harcourt.
- There is normally no transfer to the first year of the degree programme.

TIMETABLES

- The lecture time-table will be released at least two weeks before the first day of lectures. For large classes the different streams shall be allocated same slot on the timetable and the streams taught in parallel classes running at different venues.
- The examination timetable will be released at least three weeks before the scheduled date of the start of examinations.
- Examinations involving large classes shall be conducted in the first week of examinations. At the time of such examinations no other examination shall be scheduled, so as to enable enough space and invigilators to be available. Large classes are defined as University-wide or Faculty-wide courses (GES and Foundation Courses).
- Scheduled times and dates for examinations must be adhered to by all students. If it is found necessary to reschedule an examination, the students will be communicated by the Chairman, Timetable Committee and the Provost or Dean of Faculty.

TEACHING

- Large classes shall be co-taught and no class shall exceed 500.
- Course outlines and course descriptions will be made available to students free of charge at the commencement of lectures.
- Continuous assessment normally constitutes 30% of the marks for the course, but may be up to 60% for courses of a practical nature. Continuous assessment will be administered during the teaching period and not as a test preceding the examination or as an extra question on the examination paper.

GRADING SYSTEM

The following system of Grade Points shall be used for all courses.

NEW STUDENT		
MARK/	LETTER	GRADE
SCORE	NOTATION	POINT
70% and above	А	5.00
60 - 69	В	4.00
50 - 59	С	3.00
45 - 49	D	2.00
40 - 44	Е	1.00
0 - 39	F	0.00

As from the 2013/2014 academic session, the following grading system shall apply in line with NUC's directives to phase out Pass degree class in the Nigerian University system:

NEW STUDENT		
MARK/	LETTER	GRADE
SCORE	NOTATION	POINT
70% and above	А	5.00
60 - 69	В	4.00
50 - 59	С	3.00
45 - 49	D	2.00
0 - 44	Fail	

14.2 Students are obliged to sit for examinations in all registered courses. Any student who fails to sit for a course examination without satisfactory reason earns the grade of 'F' and must re-register for the course(s)

COMPUTATION OF GRADE POINT AVERAGE

- Every course carries a fixed number of Credit Units (CU), one Credit Unit being when a class meets for one hour every week for one semester, or three hours every week in the laboratory, workshop or field.
- Quality points (QP) are derived by multiplying the Credit Units for the course by the Grade Points earned by the student: e.g. in a course with 3 Credit Units in which a student earned a B with 4 Grade Points, the Quality Points are $3 \times 4 = 12$.

- Grade Point Average (GPA) is a derived by dividing the Quality Points for the semester by the Credit Units for the Semester: e.g. in a semester where the student earned 56 Quality Point for 18 Credit Units, the GPA is $56 \div 18 = 3.11$.
- Cumulative Grade Point Average (CGPA) is derived by adding the Total Quality Point (TQP) to date and dividing the Total Credit Units (TQP) to date: e.g. if the TQP are 228 and the TCU are 68, then the CGPA is $228 \div 68 = 3.35$.
- Detailed example of how to calculate GPA and CGPA.

TIKOT TEAK, DEMEDTER ONE							
	Credit	Letter	Grade	Quality	Grade Point	Cumulative	
COURSE	Units	Grade	Points	Points	Average	Grade Point	
					(GPA)	Average (CGPA)	
APC 100	3	В	4	12	QP = 66	TQP = 66	
APC 101	2	С	3	6	CU = 17	TCU = 17	
APC 102	1	С	3	3	GPA - 66÷17	$CGPA = 66 \div 17$	
APC 103	4	В	4	16	= <u>3.88</u>	= <u>3.88</u>	
APC 104	5	А	5	2.5			
APC 105	2	D	2	4			
TOTAL	17			66			

FIRST YEAR, SEMESTER ONE

FIRST YEAR, SEMESTER TWO

	Credit	Letter	Grade	Quality	Grade Point	Cumulative
COURSE	Units	Grade	Points	Points	Average	Grade Point
					(GPA)	Average (CGPA)
GLY 106	5	Е	1	5	QP = 48	TQP = 114
GLY 107	4	D	2	8	CU = 17	TCU = 34
GLY 108	5	В	4	20	GPA 48÷17	$CGPA = 114 \div 34$
GLY 109	0	F	0	0	= <u>2.82</u>	= <u>3.55</u>
GLY 110	3	А	5	15		
TOTAL	17			48		

SECOND YEAR, SEMESTER ONE

· · · · · · · · · · · · · · · · · · ·						
	Credit	Letter	Grade	Quality	Grade Point	Cumulative
COURSE	Units	Grade	Points	Points	Average	Grade Point
					(GPA)	Average (CGPA)
GLY 210	2	Е	1	2	QP = 61	TQP = 175
GLY 211	3	С	3	9	CU = 18	TCU = 52
GLY 212	5	В	4	20	GPA 61÷18	$CGPA = 175 \div 52$
GLY 213	5	С	3	15	= <u>3.39</u>	=3.37
GLY 214	3	А	5	15		
TOTAL	18			61		

SECOND YEAR, SEMESTER TWO

	SECOND TEIN, SEMESTER TWO							
	Credit	Letter	Grade	Quality	Grade Point	Cumulative		
COURSE	Units	Grade	Points	Points	Average	Grade Point		
					(GPA)	Average (CGPA)		
GLY 215	3	В	4	12	QP = 59	TQP = 234		
GLY 216	4	С	3	12	CU = 18	TCU = 70		
GLY 217	5	В	4	20	GPA	$CGPA = 234 \div 70$		
GLY 218	0	F	0	0	59÷18	= <u>3.34</u>		
GLY 219	3	С	3	9	= <u>3.28</u>			
GLY 109	3	D	2	6				
TOTAL	18			59				

Note: GLY 109 has been passed in second year, semester Two. The CU is therefore used in that year the candidate passed and the failure in year one semester two computed as O credit units

	Credit	Letter	Grade	Quality	Grade Point	Cumulative
COURSE	Units	Grade	Points	Points	Average	Grade Point
					(GPA)	Average (CGPA)
GLY 300	3	В	4	12	QP = 51	TQP = 285
GLY 301	3	С	3	9	CU = 14	TCU = 84
GLY 302	0	F	0	0	GPA - 51÷1	$CGPA = 285 \div 84$
GLY 303	4	В	4	16	= <u>3.64</u>	= <u>3.39</u>
GLY 304	2	А	5	10		
GLY 305	2	D	2	4		
TOTAL	14			51		

THIRD YEAR, SEMESTER ONE

THIRD YEAR, SEMESTER TWO

	ы ш ч , ов		1.110			
	Credit	Letter	Grade	Quality	Grade Point	Cumulative
COURSE	Units	Grade	Points	Points	Average	Grade Point
					(GPA)	Average (CGPA)
GLY 310	3	D	2	6	QP = 55	TQP = 340
GLY 311	3	С	3	9	CU = 18	TCU = 102
GLY 312	3	Е	1	3	GPA - 55÷1	$CGPA = 340 \div 10$
GLY 313	4	В	4	16	= <u>3.06</u>	= <u>3.33</u>
GLY 344	3	А	5	15		
GLY 315	0	F	0	0		
GLY 218	2	С	3	6		
TOTAL	18			55		

Note: candidate passed GLY 218 in the third year semester two and passed GLY 302 in fourth year semester one, candidate passed GLY 315 in fourth year semester two, the CU of the fail courses were used in the respective years/semester that the candidate passed the fail courses.

FOURTH YEAR, SEMESTER ONE

	Credit	Letter Gr	Grade	Quality	Grade Point	Cumulative
COURSE	Units		Points	Points	Average	Grade Point
					(GPA)	Average (CGPA)
GLY 400	3	А	5	15	QP = 63	TQP = 403
GLY 401	3	С	3	9	CU = 20	TCU = 122
GLY 402	3	В	4	12	GPA - 63÷2	$CGPA = 403 \div 12$
GLY 403	4	С	3	12	= <u>3.15</u>	= <u>3.30</u>
GLY 404	2	E	1	2		
GLY 405	2	D	2	4		
GLY 302	3	С	3	9		
TOTAL	20			63		

FOURTH YEAR, SEMESTER TWO.

	Credit	Letter	Grade	Quality	Grade Point	Cumulative
COURSE	Units	Grade	Points	Points	Average	Grade Point
					(GPA)	Average (CGPA)
GLY 410	3	В	4	12	QP = 88	TQP = 491
GLY 411	3	D	2	6	CU = 25	TCU = 147
GLY 412	3	С	3	9	GPA - 88÷2	$CGPA = 491 \div 14$
GLY 413	4	В	4	16	= <u>3.52</u>	= <u>3.40</u>
GLY	3	А	5	15		
GLY 415	6	В	4	24		
GLY 315	3	D	2	6		
TOTAL	25			88		

Note that since 2005 candidate can graduate with a maximum of any two failed courses but the CU of such failed courses must be used in the computation of the final CGPA.

• Grades obtained in all approved courses of a student's prescribed programme, excluding elective/audited courses, shall be used to compute the GPA.

- When a student has registered a course but the result is unavailable, due to no fault of the student's, no result will be recorded for that course and the student will re-register it in the next academic year as first attempt.
- When a student transfers from one Faculty to another, only the grades obtained in the courses in the new prescribed programme of study will be used to compute the CGPA. Courses which were completed before the change of programme and which are not part of the new prescribed programme will be treated as audited courses.
- When a student transfers from another University, only the grades obtained in the Department of Geology, University of Port Harcourt will be used to compute the CGPA

16. CONTINUATION, PROBATION AND WITHDRAWAL

16.1 **Continuation Requirement.**

The continuation requirements in the Department of Geology, University of Port Harcourt is a CGPA of 1.50 shall be at the end of every academic year.

16..2 **Probation**

Probation is a status granted to a student whose academic performance falls below an acceptable standard. A student whose Cumulative Grade Point Average is below 1.50 at the end of a particular year of study earns a period of probation for one academic session.

16.3 advised-Wiyhdrawal from Program

A student whose cumulative Grade Point Average is below 1.50 at the end of one years probation shall be required To withdraw from the programme. However, to minimize waste of human resources, consideration shall be given to withdrawal from the program of study and possible transfer to other programmes within the University, provided CGPA is not below 1.00. moreover the student shall meet the Departmental and Faculty requirements concerning UTME subjects. UTME score and relevant O-Level credits. The faculty/faculty must be willing to accept the student. Student transferring from medicine,Dentistry, and Pharmaceutical sciences to the Faculty of Science under the condition must have a continuation CGPA of 2.00.

16.4 Limitation of registration

Students on probation may not register more than 15 units per semester. The purpose of the restriction is to give the students a chance to concentrate on improving their performance and thus raising their CGPA.

16.5 Warning of danger of probation

Students are being warned that if at the end of any semester their GPA falls below 1.50 they will be on probation and failure to improve; they will be asked to withdraw from the Department and University.

16.6 **Repeating Failed Course Unit(s)**

Subject to the conditions for advised-withdrawal and/or probation, a student must repeat the failed course unit(s) at the next available opportunity, provided that the total number of credit units carried during that semester does not exceed 24.

16.7 **Temporary Withdrawal from study.**

(i) Any student who takes ill and goes into hospital should write and inform the university about the sickness, and when discharged should write to inform the university and attach the medical report(s) to the application of resumption of study. The medical papers should be authenticated by the Health Services Department. Any student who takes off without permission or informing the university and stays away for more than 2 years should regard himself or herself as being out of the programme. Application for temporary withdrawal is one year for the first instance and thereafter renewable for another one year only.

The Application should specify the period (Session) to be away and the session for resumption of study.

- (ii) Any student who has genuine reason(s) to request for temporary withdrawal from study should inform the University in writing through the Department and Faculty stating the reason(s) and session to be away; and obtain approval by Senate.
- (iii) Temporary withdrawal from study is for one academic session and for a just cause may be renewed for only one more session.

16.8 **Resumption of Studies**

The student should notify the University at the time he/she resumes studies with evidence of approval of temporary withdrawal from studies.

16.9 To Write Examination as First Attempt

Any student who takes ill and goes into hospital during examination should write and inform the University and attach the original of the Medicals Report(s). The application to write the missed examination as first attempt should indicate the course(s), semester and session involved. The medical report(s) should be authenticated by the Health Services Department of the University. Thereafter, the application will considered by the Departmental Faculty Boards respectively and recommend to Senate for approval.

16.10 Withdrawal

A student whose Cumulative Grade Point Average is below 1.00 at the end of one year's probation shall be required to withdraw from the Department and will be allowed to transfer to other Departments within the University; provided CGPA is not below 0.50. The student must meet with the departmental and Faculty

requirement with regards to UTME subjects, UTME Score, and relevant O-Level credits. The Faculty/Department must be willing to accept the student.

16.11 **Duration of Degree Programme in the Department**

The maximum length of time that a student shall be permitted to spend on the Department of Geology standard 4year programme shall be 6 years. Any student who after the maximum length of time allowed for a degree programme, has not obtained a degree, shall have his degree result calculated on fail out basis.

17 CLASSIFICATION OF DEGREES

17.1 The degree shall be awarded with 1st, 2nd Upper, 2nd Lower, or 3rd Class Honours, or as a Pass degree. The Cumulative Grade Point Averages for these classes shall be:

CLASS OF DEGREE	CUMULATIVE GRADE POINT AVERAGE	
	*OLD STUDENTS	NEW STUDENTS
1 st Class	4.50 - 5.00	4.50-5.00
2 nd Class Upper	3.50 - 4.49	3.50-4.49
2 nd Class Lower	2.40 - 3.49	2.40-3.49
3 rd Class	1.50 - 2.39	1.50-2.39
Pass	1.00 - 1.49	Not applicable

*Old students are those enrolled in second or higher level course before the 2015/2016 session. New students are those enrolled in the first year of the degree programme in the 2015/2016 session and after that. In line with the directives of the National Universities Commission (NUC), with effect from the new intake of 2015/2016 academic session, the classification of First Degree in Nigerian Universities terminate at Third Class. In other words, 'Pass' Degree has been abolished.

18 EXAMINATION REGULATIONS

- **18.1** Examiners will ensure that the question papers are prepared under conditions of maximum security and are ready on time. Well-packaged exam question papers will be accompanied with a list of Supervisors, Invigilators and the relevant forms. The Examiners will ensure that the question papers, are adequately packaged and sealed, and are submitted to the Supervisor at least one hour before the start of the examination.
- 18.3 For each examination there will be a supervisor and invigilators in a ratio of at least one invigilator to 50 students, including both male and female invigilators.
- 18.4 For university-wide course examinations and any other examination outside the department of geology, the Department will appoint supervisors and invigilators and forward the list to the Head of the Teaching Department not later than one week before the commencement of semester examinations. For such an examination, Students will be seated according to their Departments and they will be invigilated by academic staff from the Department of Geology.
- 18.6 Supervisors will identify and check students into the examination hall using the authenticated register of students for that course. The student must show the invigilator his/her registration/identity card on entry to every examination. He/she must leave these on the desk throughout the examination for easy inspection by the invigilator.
- 18.7 All examination scripts used by the students will be endorsed by the supervisor at least 30 minutes after the commencement of the examination.
- 18.8 No student must remove from the examination venue any paper or other examination material except the printed question papers where it is allowed. Answer booklets are the property of the University and must not be in the possession of student.
- 18.9 During examinations the security will be stepped up, especially around examination centers, to ensure the safety of staff and students and also ensure that no persons not involved in the examinations are allowed to loiter around the hall.
- 18.10 No unregistered student will be allowed to take any examination.
- 18.11 All students should be in the examination room at least 30 minutes before the start of the examination. A student who is up to 30 minutes late shall be admitted, but shall not be given any extra time. A student who arrives more than 30 minutes after the start of the examination shall not be admitted. A student may be allowed to leave the examination room temporarily before the end of the examination, but must NOT.
 - (a) do so during the first hour of the examination except in cases of emergency like illness;
 - (b) do so unaccompanied OR with his scripts.
- 18.12 All students must write their name and matriculation number and sign the attendance register within the first hour of the examination.
- 18.13 All students must write their matriculation number (not name) at the appropriate places on the cover and pages of the answer booklet.
- 18.14 No student shall keep any mobile phones, Tablets, cameras, communication devices, handbag, briefcase, books notebooks, or paper near or on him/her during the examination. Failure to adhere to this the student will be asked to leave the examination as he/she is not ready for the examination.

- 18.15 No student shall directly or indirectly give or accept any assistance during the examination, including lending, borrowing any material, purposely opening his/her answer sheet for another student to copy, giraffe or spy and exchanging of questions papers.
- 18.16 No student shall continue writing when, at the end of the allotted time, the invigilator orders all students to stop writing.
- 18.17 All student should avoid noise-making and/or communicating with any other student or with any other person, except with the invigilator if necessary during examinations.
- 18.18 Student who disrupts an examination at any venue will have their 'examination cancelled'. And they will be required to re-register for the course.
- 18.19 At the end of the examination the Supervisor/Invigilator would ensure that the scripts are checked, properly packaged, and returned along with relevant forms to the Chief Examiner.
- 18.22 These examination regulations apply to all students (B.S.c, PGDG, M.S.c and PhD) studying for the award of University of Port Harcourt degrees in Geology Department, and where appropriate to all staff.

RESULTS

All results will be posted online by the university and students are expected to check for their results online once the university releases information that results have been posted online.

BEHAVIOR/CONDUCT OF STUDENTS

Any student involved in falsification of his/her credentials or results, or proved to belong to a secret cult will be deregistered immediately from the department.

DRESS CODE

- All students of the department of geology must be properly and decently dressed to lectures and must put on appropriate field wok safety kits and dressed accordingly. Seductive and provocative dressing and incomplete field work dress kit, resulting in indecent exposures of body, sagging and poor field safety compliance in dressing, attracts serious consequences.
- All students are expected to obtain and use laboratory coats and other safety wears recommended by the department for practicals and field trips.
- Any genuine, proven case of sexual harassment on any student by fellow student or lecture or any other staff of the Department should be reported to the Head of Department in Writing or to the dean or to the Provost or Vice chancellor as the case may be.
- We are here to protect and prepare you for a prestigious future, so dress as you want to be addressed.

22 PROCEDURE FOR THE REVIEW OF SCRIPTS OF AGGRIEVED STUDENTS

- 22.1 Students shall be entitled to see their marked examination scripts if they so desire, provided appropriate steps are taken to safeguard the scripts by the department.
- 22.2 Any student who is aggrieved about the grading of a course examination may petition the Head of Department in the first instance. The Head of Department will refer the petition to the Dean of the Faculty, who shall cause the script's to be re-assessed and the scores presented to the Faculty Board for determination.
- 22.3 A student applying for a review of answer scripts shall be required to pay the approved fee to the Bursary Department before commencement of the review. This shall be exclusive of postage and honorarium to the reviewer where applicable.
- 22.4 If the appeal results in a significant improvement (i.e. a change in letter grade) on the student's original grade, the fee so paid shall be refunded to the student within 30 days from the release of the result. Students whose letter grade is not marked higher lose their money.
- 22.5 Application for review of answer scripts must be made not latter than one month from the date of publication of provisional results by the Faculty.
- 22.6 The application must be personal, i.e. an appeal by someone for the review of someone else's script shall not be entertained.
- 22.7 No group appeal by candidates involved in the examination in question (or any other group of persons) shall be entertained.

23 EXAMINATION MALPRACTICES

23.1 **Definition of Examination Malpractice.** Examination malpractice shall be defined As All Forms of cheating

Examination malpractice shall be defined As All Forms of cheating which directly or indirect Falsify the ability of the student. These shall include cheating within an examination hall, cheating outside examination hall, and any involvement in all illegal examination-related offences. Forms of cheating are categorized as follows:

A. Cheating within an examination hall/room

- 1. Copying from one another/exchanging question/answer sheets
- 2. Bringing in prepared answers, copying from textbooks, notebooks, laboratory specimens or any other instructional aids smuggled into the examination hall.

- **3.** Collaboration with an invigilator/lecturer where it involves the lecturer providing written/oral answers to a student in the examination hall.
- **4.** Oral/written communication between/amongst students.
- 5. Bringing in prepared answers written on any part of the body.
- 6. Receiving information, whether written or oral, from any person(s) outside an examination hall.
- 7. Refusal to stop writing at the end of the examination.
- 8. Impersonation.
- 9. Non-submission of answer scripts at the end of an examination.
- 10. Illegal removal of answer scripts from the examination hall.
- 11. Copying laboratory and fieldwork reports and or term papers or others.
- 12. Manipulation of registration forms in order to sit for an examination for which the student is not qualified
- **13.** Sitting for an examination for which the student is not qualified as a result of manipulation of registration forms
- **14.** Colluding with a medical doctor in order to obtain an excused duty/medical certificate on grounds of feigned illness.
- **15.** Using an electronic device to cheat e.g. handset, i- pad, i-pod, etc.

B. Cheating outside the examination hall/room

- 1. Plagiarism is a form of examination malpractice and should be investigated and punished. Plagiarism is the use of another person's work without appropriate acknowledgement both in the text and in the references at the end.
- 2. Colluding with a member of staff to obtain or on his own initiative obtaining set questions or answers beforehand.
- 3. Colluding with a member of staff to modify or on his/her own initiative modifying students' score cards, answer scripts and/or mark sheets.
- 4. Colluding with a member of staff in order to submit a new, prepared answer script as a substitute for the original script after an examination.
- 5. Writing of projects, laboratory and/or field reports on behalf of a student by a member of staff.
- 6. Soliciting for help after an examination.
- 7. Secretly breaking into a staff office or departmental office in order to obtain question papers, answer scripts or mark sheets, or substituting a fresh answer scripts for the original script.
- 8. Refusing to co-operate with the Faculty Investigating Panel or the Senate Committee on Examinations Malpractices in the investigation of alleged examination malpractices.

C. Relate offences

- 1. Producing a fake medical certificate.
- 2. Assault and intimidation of the invigilator within or outside the examination hall.
- 3. Attempting to destroy and/or destroying evidence of examination malpractice.
- 4. Intimidation/threats to extort sex/money/other favours from students by a member of staff in exchange for grades.

23.2 HANDLING OF EXAMINATION MALPRACTICE

- 23.2.1 Any unauthorized material found in the possession of a student shall be seized by the Invigilator after the student has signed it, acknowledging that is was retrieve from him/her. Refusal to sign is tantamount to acceptance of guilt.
- 23.2.2 Where the student refuses to sign, the Invigilator will make a clear statement on the answer sheet and sign.
- 23.2.3 The student will, however, not be prevented from finishing the examination.
- 23.2.4 The Invigilator will, immediately after the examination, submit a written report to the Head of the Department conducting the examination.
- 23.2.5 The report shall include all necessary information, following the university format.
- 23.2.6 The Department will set up a committee/panel to examine the merit of the case.
- 23.2.7 If the Departmental Board feels that a prima facie case has been established, the cases will be presented to the Faculty Board which shall appoint a panel to investigate the case and report back to the Faculty.
- 23.2.8 If the Faculty is satisfied that a case has been established, the case will be reported to the Senate Committee on Examination Malpractices (SCEM).
- 23.2.9 The Senate Committee on Examination Malpractices (SCEM) shall investigate the case and report to Senate for decision.
- 23.2.10 The investigation of examination malpractice will take as much time as it takes to dispose of the matter, but it will not go beyond the end of the semester following the one in which the offence was allegedly committed. Meanwhile, the student allegedly involved in an examination malpractice will be allowed to register for courses and take examinations in them. But results of the courses shall not be released by the department or any other department until investigation has been completed and his/her innocence established by Senate.

24. PUNISHMENT FOR EXAMINATION MALPRACTICE

- 24.1 (a) A student found guilty of any form of examination malpractice in section **A**, has the result in the course cancelled and suspended for the one semester for a first offence. Suspension for one session is the punishment for a second offence.
 - (b) A student found guilty of any form of examination malpractice in section **B**, has the result in the course cancelled and is suspended for the first offence. Expulsion from the University is the punishment for a second offence.
 - (c) A student found guilty of any offence in section **C**, is expelled from the University.
 - (d) Member of staff involved in aiding and abetting students in examination malpractice will be made to appear before an investigation panel. If the member of staff is found guilty, the report will be sent to the appropriate Disciplinary Committee.
- 24.3 The decision take effect immediately with the publication of this department of geology handbook of academic Programmes.
- 24.4 For students involved in an examination malpractice and proven guilty, Senate will take the ultimate decision, while for staff; the appropriate Disciplinary Committee (as specified in the conditions of service) will forward its recommendation to Council.

25. SECRET SOCIETIES/CULTS

24.1 Secret societies/cults are anti-social and are banned by the University. Any student proved to belong to a secret society will be expelled.

UNDERGRADUATE PROGRAMME (B.S.c Geology)

Course Outline and Description YEAR ONE: FIRST SEMESTER COURSES

YEAR	ONE: FIRST	SEMESTER COURSES		
S/NO	COURSE	TITLE OF COURSE	TITLE OF COURSE	
	NUMBER			
1.	GES 100.1	Communication Skill in English	Communication Skill in English	
2.	GES 102.1	Intro. To Logic and Philosophy		2
3.	CHM 130.1	General Chemistry		3
4.	PHY 101.1	Mechanics and properties of matter		3
5	PHY 102.1	Laboratory Practice 1		1
6	MTH 110.1	Algebra and Trigonometry		3
7	FSB 101.1	Fundamental principle of life		3
8	MTH 120.1	Calculus		3
				Total = 21
YEAR	ONE: SECON	ND SEMESTER COURSES		
1.	GLY 101.2	Planet Earth		3
2.	GLY 102.2	Laboratory/Field Practice Geology		2
3	GES 101.2	Computer Appreciation & Appl.		2
4	GES 103.2	Nigeria Peoples & Culture		4
5	CHM 132.2	Introduction to principles of Organic Chen	nistry	3
6	PHY 112.2	Introduction to Electricity & Magnetism		3
7	PHY 103.2	Laboratory Practice II		1
				Total = 18
YEAR	TWO: FIRST	SEMESTER COURSES		
1.	CHM 235.1	Analytical Chemistry 1	4	
2.	CHM 250.1	Inorganic Chemistry I	3	
3.	CHM 260.1	Organic Chemistry I	3	
4.	MTH 260.1	Introductory to probability & statistics	4	
5.	GLY 201.1	Stratigraphy & Historical Geology	2	
6.	GLY 202.1	Structural Geology	2	
7.	GLY 203.1	Crystallography & Mineralogy	2	
			Tota	l = 20
YEAR	TWO: SECON	ND SEMESTER COURSES		
1.	GLY 204.2	Field Geology	3	
2.	GLY 205.2	Optical Mineralogy	3	
3.	GLY 206.2	Sedimentology	1 65	
4.	CHM 240.2	Physical Chemistry I 3		
5.	PHY 205.2	Heat, Thermodynamics, Optics 3		
6.	PSI. 2CS.2	Community Service 1		
			Tota	l = 16
		-		
YEAR	THREE: FIRST S	SEMESTER COURSES		
1.	GES 300.1	Principles of Entrepreneurship	2	
2	GLY 301 1	Sedimentary Petrology 2		

1.	GES 300.1	Principles of Entrepreneurship	2
2.	GLY 301.1	Sedimentary Petrology	2
3.	GLY 302.1	Igneous Petrology	2
4.	GLY 303.1	Structural Geology II	2
5.	GEO 346.1	Elementary Surveying	3
6	GLY 304.1	Systematic Paleontology	3
7	GLY 305.1	Practice Geologic Mapping	2
8	GLY 306.1	Principles of Geophysics	2
9	GLY 307.1	Metamorphic Petrology	3
	GLY 308.1	Principles of Geochemistry	2
			Total = 23

YEAR THREE: SECOND SEMESTER COURSE

1.	GLY 309.2	Industrial Work Experience	9		

TEART	YEAR FOUR: FIRST SEMESTER COURSES				
1.	GES 400.1	Entrepreneurship Project	2		
2.	GLY 401.1	Petroleum Geology	3		
3.	GLY 402.1	Global Tectonics	2		
4.	GLY 403.1	Micropaleontology and Palynology	2		
5.	GLY 404.1	Economic Geology	2		
6.	GLY 405.1	Hydrogeology	2		
7.	GLY 406.1	Marine Geology	2		
8.	GLY 407.1	Engineering Geology	2		
9.	GLY 408.1	Remote Sensing and Geomatics	2		
10	GLY 409.1	Regional Geology of Africa and Geology of			
		Nigeria	2		
			Total = 21		
YEAR F	OUR: SECONI	D SEMESTER COURSES			
1.	GLY 410.2	Introduction to Sequence Stratigraphy			
2.	GLY 411.2	Environmental Geology	2		
3.	GLY 412.2	Applied Geophysics	2		
4.	GLY 413.2	Applied Geochemistry	2		
5.	GLY 414.2	Geological Mapping Project	2		
6.	GLY 415.2	Seminar in Geology	3		
7.	GLY 416.2	Research Project	2		
			6		
			Total = 19		

EIDST SEMESTED COUDSES

<u>YEAR ONE</u> <u>FIRST SEMESTER</u>

VEAD FOUD.

GES 100.1 Communication Skill in English (3)

The course seeks to develop in the students a well-informed attitude to the English Language and to equip them with the knowledge of English communication and study skill that will facilitate their work in the University and beyond.

GES 102.1 Introduction to Logic & Philosophy (2)

A brief survey of the scope, notions, branches and problems of philosophy symbolic logic, specific symbols in symbolic logic. Conjunction. Affirmation, negation, disjunction, equivalence and conditional statements. Law of thought. The method of deduction, using rule of inference and bi-conditions. Quantitative theory.

CHM 130.1 General Chemistry (3)

Basic principles of matter and energy from the chemist's point of view. A broadly based course suitable for students from various schools as well as those from the Faculty of Science. Topics to be covered will include matter and units of measurement, atomic theory and molecular structure, stoichiometry, the periodic classification of the elements, atomic structure, chemical bonding, thermochemistry, properties of gases and gas laws, solids, liquids and solutions

PHY 101.1 Mechanics and properties of matter (3)

Topics covered in this course will include the following: Motion in one dimension, motion in a plane, work and energy, conservation laws, collision, solid friction, rotational kinematics and rotational dynamics, equilibrium of rigid bodies, oscillations, gravitation, fluid statics and fluid dynamics. Surface tension, viscosity and hydrostatics.

PHY 102.1 Laboratory Practice 1 (1)

This course emphasizes experimental verification and quantitative measurements of physical laws, treatment of measurement errors and graphical analysis. The experiments include studies of mechanical systems, static and rotational dynamics of rigid bodies, viscosity, elasticity, surface tension and hydrostatics.

MTH 110.1 Algebra and Trigonometry (3)

Elementary notions of sets, subsets, union, intersection, compliments, Venn diagrams. Real numbers, integers, rational and irrationals, mapping of sets. Real functions and their compositions. Quadratic functions. Cubic function, roots of quadratic and cubic functions. Partial fractions. Equations with complex roots. Complex numbers. Geometric representation of complex numbers, De Moirvers, series and sequences. Principle of mathematical induction. Binomial theorem. Trigonometry functions of angles. Circular functions. Addition theorems. Double and half angles.

FSB 101.1 Fundamental principle of life (3)

Characteristics of life. Investigations in Biology, the scientific method; the substance of life, the unit of life (including methods of study); activities of cells, the control of metabolic activities; basic principles of inheritance (Genetics), evolution.

MTH 120.1 Calculus (3)

Function of a real variable, graphs, limits and idea of continuity. The derivative as limit of rate of change. Technique of differentiation. Extreme curve sketching; integration as an inverse of differentiation. Methods of integration. Definite integrals. Application to areas, volumes.

<u>YEAR ONE</u> SECOND SEMESTER

GLY 101.2 Planet Earth (3)

The course teaches the student the following: Origin of the Universe and the solar system. Structure and composition of the earth. The common rock-forming minerals. The major rock groups. Elements of structural Geology and Crystallography. Surface processes (Weathering, erosion, transportation and deposition). Elements of Historical geology, Paleontology and Stratography. Concepts of Paleogeography, paleoclimatology, Paleoenvironment, Paleoceanography and Paleomagnetism. Introduction to concepts of continental drift, sea floor spreading and plate tectonics.

GLY 102.2 Laboratory/ Field Practice Geology (2)

This is purely a Laboratory and fieldwork course. It includes megascopic identification of common rock-forming minerals and common rock types. Interpretations of simple topographic and geologic maps. Identification of index macrofossils and correlation exercises and geochemical analysis. The student shall as well go for a fieldwork.

GES 101.2 Computer Appreciation and Application (2)

History of computers. Generation and classification of computers; IPO model of a computer; components of a computer system hardware and software; programming language; organization of data; data computer techniques; introduction to computer network. Use of Keyboard as an input device: DOS, Windows, Word Processing, Spreadsheet: Application of Computers to Medicine, Social Sciences, Humanities, Education and Management Sciences.

GES 103.2 Nigeria Peoples & Culture (4)

The overall objective of this course is to help students understand the concept of culture and its relevance to human society especially as it relates to development. In more specific terms, the course will be designed to help the students know the history of various Nigerian cultures beginning with pre-colonial Nigeria society. Colonialism constitutes a vital watershed in Nigerian history. Thus the course will identify the influence of colonialism on Nigerian culture, and focus on contemporary Nigerian culture explaining issues that relate to the political economic, educational, religious and social institutions in the nation. The course outline includes the concept of culture; precolonial culture and languages of Nigeria; principles of kinship, descent and marriage in Nigerian culture; the colonial impact; Nigerian economic institutions; education and development in Nigeria; religion in Nigerian culture; culture, environment and health practices in Nigeria; intergroup relations.

CHM 132.2

Introduction to principles of Organic Chemistry (3)A survey of carbon compounds including an overview of the common functional groups in aliphatic and benzenoid compounds. Introduction to reactants and reactions in organic chemistry.

PHY 112.2 Introduction to Electricity & Magnetism (3)

This is the introductory course on Electricity and Magnetism. Topics covered will include the electric field, Gauss's Law, Electric Potential, Capacitors and Dielectric, current and resistance, electromotive force and circuits, the magnetic field, Ampere's Law, Faraday's Law of induction.

PHY 103.2 Laboratory Practice II (1)

The experiment carried out in this course will cover areas discussed in PHY112.2. These experiments include verifications of the current electricity, measurement of electrical properties of conductors, d.c. and a.c. circuit properties, series and parallel resonant circuits, transformer characteristics and other electrical circuit problems.

<u>YEAR TWO</u> FIRST SEMESTER

CHM 235.1 Analytical Chemistry 1 (4)

Introduction to basic analytical chemistry. Concepts of qualitative and quantitative analysis. Sampling methods: representative, homogenous/heterogeneous. The theory of errors: types of errors instrumental and personal errors, sources and prevention, determinate and indetermi9nate errors. Statistical treatment of data: significant figure, mean, mode, accuracy, precision, standard deviation relative error, student t-tests, Q-test, F-test, confidence level and regression analysis calibration curves. Gravimetric analysis, concept of ligands and chelation. Volumetric analysis: acidimetric and alkalimeter, acid-base indicators, primary standards, precipitation and redox titrations, applications of volumetric analysis, balancing of equations. Introduction to eletroanalytical methods: electrogravimetry and coulometry

CHM 250. 1 Inorganic Chemistry I (3)

The physical principles of Inorganic Chemistry are treated. Topics include chemistry of non-transition elements and alloy chemistry.

CHM 260.1 Organic Chemistry I (3)

Fundamental theories and principles of chemical reactivity. Chemistry reactions and synthesis of monofunctional compounds. Reaction and mechanism of common reactions, stereochemistry.

MTH 260.1 Introductory to probability & statistics (4)

Definition of probability, frequency and probability of events. Equally likely events counting techniques. Conditional probability. (Baye's Theorem) independent events, random variables, probability distribution. The central limit theorem, mathematical expectation, moments, the mean, variance, variance of a sum, covariarance and correlation, conditional expectation. Analysis of variance plus contingency table plus parametric inference.

GLY 201.1 Stratigraphy/ Historical Geology (2)

Element of Chrono, Litho, Bio, Magneto and Seismic stratigraphy. Global regression and transgression. Principles of stratigraphy. Stratigraphic terminology, nomenclature, classification and procedure. Stratigraphic correlation, facies analysis. Basins and stratigraphic evolution of sedimentary basins (emphasize Benue Trough) and Geohistory analysis. Practical to include facies map, correlation and stratigraphic cross-sections.

GLY 202.1 Structural Geology 1 (2)

Fundamentals of structural Geology. Description, genesis, classifications and interpretations of deformational structures. Unconformities, faults, folds and structural features related to igneous activity etc. Practical to include: three (3) point problems, interpretation of geologic and aerial photomaps.

GLY 203.1 Crystallography and Mineralogy (2)

Morphological, structural and geometric crystallography. Crystal chemistry, stereographic projections. Systematic classification and description of rock-forming mineral groups. Mineral chemistry and genesis. Principle of polarizing and binocular microscope. Basic physical and optical characteristics of common rock-forming minerals. Practical to include crystals projections, the binocular and polarizing microscope, petrology and petrography of common minerals and rocks.

<u>YEAR TWO</u> SECOND SEMESTER

GLY 204.2 Physical and Field Geology (3)

The purpose of Physical Geology is to learn to appreciate and interpret the stratigraphic rock record of physical processes and their relevance to the continuously changing modern world. As resources become more limited and environments more stressed, knowledge of what the earth is made of and how and why it has and will continue to change becomes increasingly critical to making wise decisions about conservation and personal and national security.

Materials that make up the Earth (elements, minerals, rocks, water). The natural processes that shape the surface of the Earth (the action of rivers, glaciers, oceans, and wind, and weathering and erosion tectonics). The natural processes that modify the interior of the Earth surface (plate tectonics, earthquakes, mountain building, volcanic eruptions,). Earth's resources that are utilized by mankind. Mankind's impact on the Earth and the environment. The compass-clinometers and other geological mapping instrument and techniques. Field measurement of distance, strike (bearing and azimuth) and dip. Concepts of scale and the globe. Outcrop descriptions. Mapping styles for sedimentary, igneous and metamorphic terrians and sample geologic structures. The use of hand lens, field identification of minerals and rocks. Method of collecting rock samples in the field. Geologic symbols. Field note taking and Geologic report preparation. Practical to include preparation of simple geologic maps.

GLY 205.2 Optical Mineralogy (3)

Principles of crystal and mineral optics. Michel Levy colour chart, Uniaxial and Biaxial figures, extinction angles, interferences colours, identification of rock forming minerals in parallel and convergent light under the polarizing microscope. X-ray methods in crystallography and mineralogy. Practical to include: petrography of some rock types, XRD identification of mineral, photomicrography.

GLY 206.1 Sedimentology I (3)

The geologic cycle, sedimentary processes, textures and structures. Composition (mineral and chemistry), origin and classification of sedimentary rocks (sandstones, carbonates, and shales), and minerals (evaporites, phosphates, manganese deposits, non rich rocks and sulphur). Diagenesis of sandstone and carbonates. Practical to include megascopic and microscopic identification of sedimentary rocks and by XRD methods, as well as diagenetic features and cement Para genesis.

CHM 240.2 Physical Chemistry I (3)

Introduction to basic physical chemistry. The emphasis is on the properties of gases, the three laws of thermodynamics and the principles of chemical kinetics and electrochemical cells.

PHY 205.2 Heat, Thermodynamics and Optics (3)

The three parts of this course are heat, under which thermometry, calorimetry and heat transfer are discussed. Thermodynamics – treat the kinetic theory of an ideal gas, equation of state, reversible adiabalic and isothermal processes, the first and second laws of thermodynamics including their consequences and Geometrical optics which discusses the fundamental principles of reflection and refraction at plane and curved surfaces; emission and absorption spectra and optical instruments.

PSI.2CS.2 Community Service (1)

This course involves the participation of students in community activities. These include manual labour in cleaning the environment, planting of flowers, painting of defaced or faded walls and surfaces, construction of foot paths, etc.

YEAR THREE

FIRST SEMESTER

GES 300.1 Principles of Entrepreneurship (2)

Introduction to Entrepreneurship and new venture creation; entrepreneurship in theory and practice; The opportunity, forms of business, Staffing, Marketing and the new venture; Determining capital requirements, Raising capital; Financial planning and management; starting a new business, Feasibility studies; innovation; Legal issues; Insurance and environmental considerations. Possible business opportunities in Nigeria

GLY 301.1 Sedimentary Petrology (2)

Major controls on sedimentation (sea level changes, climatic changes, tectonic and other secular variations). Quantitative measurement and geostatistical treatment of sedimentological data. Depositional models alluvial fern, braided and meandering rivers, fluvial deposits, beaches and barrier islands, intertidal flats, storm and tidal sand ridges, turbidities, reefs and other carbonate deposits). Application of depositional models to the exploration and exploitation of stratabound mineral resources. Practical to include: Petrography of sandstone and carbonates; histogram, cumulative frequency, paleocurrent and bivariate plots, exercises on other geostatistical techniques and the reconstruction of paleodepositional environments from outcrop and subsurface data.

GLY 302.1 Igneous Petrology (2)

Definitions and introduction. The rock cycle. Origin and evolution of magma. Chemistry of magma. Physical characteristics of magma. Magmatic crystallization; differentiation and magma types. Petrogenesis and petrography of igneous rocks. Chemistry of igneous rocks (silica saturation and alumina saturation). Major, trace and rare earth element geochemistry of common igneous rocks. Phase equilibria. Classification, description and geologic setting of igneous rocks. Mode of occurrence of igneous rocks (internal and external processes). Plate tectonics and igneous rocks provinces. Igneous rock province of Nigeria and West Africa. Geostatistical treatment of quantitative data from igneous rocks.Practicals to include petrography, chemical analysis (including calculation of CIPW and NIGGLI norms) and interpretation of igneous rocks.

GLY 303.1 Structural Geology II (2)

Stress and response of rocks to stress. The brittle- ductile continuum. Strain. Mohr's diagrams and Flin's and Tsu diagrams. Primary and secondary structures. Foliation and lineation. Models for fold development. Microstructures: faults and folds. The tectogenesis and structural analysis of major regional and complex deformational structures. Tectonic origin evolution and classification of sedimentary basins. Concepts of cratons, mobile belts, geostructures, orogenesis and membrane tectonics. Palm spastic reconstructions of fold belts. Statistical and geometrical analysis of tectonic structures. Practical to include: use of stereographic projection in solving structural problems. Structural interpretation of regional geological maps, structural cross sections and palm spastic map analysis.

GEO 346.1 Elementary Surveying (3)

Basic principles and types of surveying. Large scale trilateration surveys with simple/basic instruments chains, tapes, abney level, clinometer, prismatic compass, etc. Construction and use of levels and staves. Contouring. Use and functions of theodolite, GPS, sextants, etc. Use of the plane tables, alidale, plotting grids. Orientation and revision of small scale maps. Basic principles of Geoinformatics.

GLY 304.1 Systematic Paleontology (3)

Morphology and classification of the major animal phyla (Protozoa's, Porfera, Bryozoans, Coelenterata, Brachiopod, Mollusca, Arthropod, Echinoderm, Graptolita) as well as vertebrates, plants and trace fossils. Stratigraphic paleontology and evolution of the important fossil groups. Paleo-environment and paleogeology of the various fossil groups. The Cretaceous and Tertiary mega- fossils of Nigeria and West Africa. Practical to include collection and identification of fossils.

GLY 305.1 Practice Geology Mapping (2)

The field course prepares the third year Geology students for their triple credit Research project in their final year. They spend seven to nine days in the field to map, a relatively small area under very close supervision. At the end of the work, a graded report is presented.

GLY 306.1 Principles of Geophysics (2)

Introduction to geophysical techniques (Seismic, gravity, magnetics, resistivity). Geophysical acquisition, processing and interpretation in petroleum geology and economic mineral. Borehole logging and analysis. Elements of basin analysis.

GLY 307.1 Metamorphic petrology (3)

Definition. Types of Metamorphism. Metamorphic processes, textures, structure, fabrics and mineralogy. Progressive metamorphism. Petrogenesis of metamorphic rocks including migmatites and cataclastites. Classification of metamorphic rocks. Metamorphic reactions. Metamorphic equilibria. Metamorphic facies. Metamorphic rock provinces. Orogenesis and the mineralogy and chemistry of common metamorphic rocks. Practicals to include petrography and chemical analysis (including applications of CIPW and NIGGLI norms).

GLY 308.1 Principles of Geochemistry (2)

Abundance, classification and description of elements in the cosmic system (Lithosphere, hydrosphere and atmosphere) and meteorites. Introduction to the principles of geochemical prospecting. Geochemical reaction rates and mass transfer Fluid envelopes – Air, water envelopes Rain, streams and Lakes. The Oceans. Environmental Geochemistry. Weathering and soils changes in Rock composition. Sequence of silicate mineral alteration. Agents of weathering. Dissolution of carbonates. Oxidation. Hydrolysis of silicates. Clay minerals. Formation of soils.

<u>YEAR THREE</u> SECOND SEMESTER

GLY 314.1 Industrial Training (9)

Every student is attached to a geological enterprise for 6 months at the end of second semester in year three. The student is closely supervised and monitored. At the end of the attachment, a report is submitted and graded.

<u>YEAR FOUR</u> FIRST SEMESTER

GES 400.1 Entrepreneurship Project (2)

Some of the projects to be focused on include the following:

Soap/Detergent, Tooth brushes and Tooth paste making; Photography; Brick; Rope making; Plumbing; Vulcanising; Brewing; Glassware production; Paper production; water treatment, conditioning, packaging. food processing packaging preservation metal working fabrication, steel and aluminum door and windows. Training industry, vegetable, oil and salt extractions fisheries, Aquaculture. Refrigeration ,air conditioning, plastic making, farming, crop. Domestic electrical wiring radio, TV, repairs carving weaving brick laying, making bakery tailoring Iron welding, Building drawing; Carpentry; Leather tanning; interior decoration, Printing; Animal Husbandry (Poultry, Piggery, Goat etc.); Metal Craft; Sanitary Wares; Vehicle Maintenance; Bookkeeping..

GLY 401.1 Petroleum Geology (3)

The physical and chemical properties of petroleum, distribution in time and space. The origin, migration, accumulation and entrapment of petroleum. Types of reservoir rocks and traps. Source rock characteristics, maturation and destruction of petroleum,. Abnormal pressure, formation water. Evaluation of petroleum prospects, exploration and appraisal methods, reserve estimation and classification.

GLY 402.1 Global Tectonics (2)

Continental drift, seafloor spreading, magnetic anomalies and paleomagnetics, polarity reversals, polar wandering and migration of continents. Earthquakes. Heat flow and vertical movements of the crust. Plate tectonics: causes, relations to mineral resources genesis, diversity and extinction of species, origin and growth of basins, rift valley basins, orogeny & orogenesis. Lunar Geology

GLY 403.1 Micropaleontology and Palynology (2)

Morphology, classification and biostratigraphic study of major groups of microfossils, especially foraminifera and their stratigraphic and paleo-environmental application. As well as morphology and classification of pollen, spores and dinaflagellates. Their stratigraphic distributions and paleo- environmental application, Practical cover sampling, preparation techniques and microscopic identification of common specimens.

Genesis and classification of ore deposits concepts of Para genesis, zoning and geothermometry. Occurrences and distribution of minerals in time and space. Plate tectonics and mineral genesis. Prospecting methods and mine development strategies and mineral treatment methods. Mineral Economics. Reserve calculations of mine hazards and control methods.

GLY 405.1 Hydrogeology (2)

The hydrologic cycle, hydrologic and hydro geologic properties of rocks. Occurrence, distribution and flow patterns of groundwater. Types of aquifers and characteristics. Fundamental hydrodynamic laws, groundwater and well hydraulics. Physical, chemical and biological properties of groundwater and inventory. Pump and aquifers tests. Groundwater exploration methods. Borehole designing and problems of groundwater exploration and exploitation and control.

GLY 406.1 Marine Geology (2)

Elements of physical, chemical and biological oceanography. Method of Ocean floor sampling and geological diagnosis. Structure, physiography, bathymetry, origin and evolution of Ocean basins. Eustatic and Isostatic changes in sea levels. Distribution of ocean floor sediments and mineral resources. Current. Wave, tide systems and sediment dispersal patterns. Shoreline erosion and deposition. Coastal management deep sea exploration projects and deep sea waste disposal methods.

GLY 407.1 Engineering Geology (2)

The Engineering properties of rocks and the engineering classification of rocks, soils and construction materials. Quarrying techniques. Elements of soil mechanics, geological site investigation, methods for building roads, bridges, dams and engineering structures. Types of foundations for engineering structures. Influence of surface and groundwater on some engineering structures.

GLY 408.1 Remote sensing and Geomatics (2)

Techniques of remote sensing, digitals mage processing, spectral properties and analysis of geological materials, lineament analysis, alternation mapping and mineral resource assessments, environmental, land use and hazard application. Current future infrared, interpretation of remote sensing data (SPOT, Land sat, MSS, RBV, TM, Seasat, SAR, air borne radar). Principles of serial photos, pattern recognition and geological interpretations. Practical: interpretation of remote sensing and aerial photos.

GLY 409.1 Regional Geology of Africa and Geology of Nigeria (2)

Structural and stratigraphic evolution and classification of Precambrian basement complexes. Pre Cambrian thermal (orogenic) events and cycles with emphasis on Africa. Pre-Cambrian Basement rock- types, structures, ages and petrology of the Nigerian basement complex and associated economic minerals. The older and younger granites of West Africa and their paleo- tectonic significance. The Paleozoic basins of Africa and their stratigraphic evolutionary histories in the light of the plate tectonic theory. Stratigraphic evolution of the Benue Trough, Chad basin, Niger Delta, Sokoto Basin, Dahomey, Bida and Calabar Basins

<u>YEAR FOUR</u> SECOND SEMESTER

GLY 410.2 Introduction to Sequence Stratigraphy (2)

Introduction, basic concepts of sequence stratigraphy. Definition of key terms, basin fill model, strata patterns, their geological interpretation and relation to relative change in sea level. Depositional environments, paleo-bathymetry and depositional profiles, sequences, system tracts depositional systems and WHO facies. Sequence stratigraphy and bio-stratigraphy. Identifying sequence system tracts from seismic well and outcrop data.

GLY 411.2: Environmental Geology (2)

Geological hazards (Erosion, Flood, desertification, Subsidence, Landslides, earthquakes, Storms and pollution sources): their origin characteristics, and geological / geographic distributions. Control and predictions. Effects on Land use and urban planning. Environmental impact of the exploration and exploitation of the earth's mineral resources, Civil Engineering structures and land reclamation. Domestic and industrial wastes (radiation etc.), disposal methods, various environmental monitoring methods. Pollution and health hazard.

GLY 412.2 Applied Geophysics (2)

Polarization and electromagnetic methods, Seismic exploration. Principles of seismic stratigraphy. Data acquisition, processing and interpretation. Application of these methods to mineral exploration, engineering geology and hydrogeology.

GLY 413.2 Applied Geochemistry (2)

Nature of applied geochemistry. Isotope The major, minor and trace element geo-chemistry of some common sedimentary, igneous and metamorphic rocks.

Sedimentation and Diagenesis: Inorganic Geochemistry formation and crystallization of magmas, volatiles and magmas. Hydrothermal Ore deposits. Geochemical prospecting. Litho geochemistry, Biogeochemistry, Atmogeochemistry and Hydro geochemistry. Geochemical anomalies.

GLY 414.2 Geological Mapping Project (3)

The student is assigned an area to map. This is followed by the production of a geological map and report of the area.

GLY 415.2 Seminar in Geology (3)

The student is required to present a seminar based either on his/her research project or any chosen subject in Geology after an in depth study through either extensive literature survey and / or data analysis and data interpretation.

GLY 416.2 Research Project (6)

An independent study of a geological problem in the student's area of interest, utilizing laboratory analysis, data interpretation and the preparation of a geologic report.

Course Registration Form LIST OF STUDENTS REGISTERED FOR A COURSE

Session
Course Number
Course Title
Teaching Dept
Parent Dept
Teaching Faculty
Parent Faculty

For Use During Registration					For Use During Exam	
S/NO	Mat.No	Name	Gender	Signature	Photograph	Signature
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27			1			
28						
29						
30						

APPENDIX 2 EXAMINATION SUPERVISOR'S REPORT

Course no.....

Course title

Date of examination

Venue (s) used

THE INIVGILATORS ALLOCATED	THE INVIGILATORS PRESENT

Total no. of students present

Total no. of scripts submitted

Comments on the examination

.....

.....

Name of supervisor	•••
ign	

APPENDIX 3: EXAMINATION INVIGILATOR'S REPORT

Course number
Course title
:
Date of
examination
Venue of examination
Time examination started
Time examination ended
Number of students
Number if answer booklets collected
Number of answer booklets used
Number of unused booklets returned
Comments on the examination
Name of invigilator
Sign

APPENDIX 4 REPORT OF EXAMINATION MALPRACTICE

Name			Of
Students/Staff			
Student's Registration	n/Matriculation Number.		
Students/Staff's			
Department			
Course	Number	(If	Applicable)
Venue of Examinatio	n (If applicable)		
Location of Examinat	tion Malpractice		
Date And Time Of Ex	xamination (If applicable)	
Examination Offence	(With evidence/Stateme	nt if any)	
Chief Invigilator/Invi	gilator's Signature		
Witness's Signature (If Any)		
Student's Comment (If Possible)		
Student's Signature (if possible)		

APPENDIX 5

UNIVERSITY OF PORT HARCOURT ADD/DROP COURSE REGISTRATION FORM

To be completed in quadruplicate (1) Dean's Office (2) Exams	& Records.	(3) D	epartment and (4)
Students Copy.			
Name			

(SURNAME FIRST) (OTHER NAMES)

Matriculation no..... sex..... Department....

Year of Study..... COURSES TO BE DROPPED

COURSE TO BE ADDED

Serial	Course No	Course Title	Credit units	Lecture's Signature and date
1				
2				
3				
4				
5				

The above changes are approved

Name Signature Date

University of Port Harcourt Faculty of Science Department of Geology

Students Results - Related Complaints

Name of Student
Matriculation Number
Course Code
Course Title
Course Lecturer (s)
Session course was taken
Date Result was released
Date of complaint

Problem: (tick as appropriate)

- 1. Wrong addition of scores from individual questions
- 2. Wrong addition of examination and continuous assessment scores
- 3. Missing continuous assessment scores
- 4. Missing examination scores
- 5. No result (i.e. No Mat. No. or name on published result)
- 6. Two results with different grades.
- 7. Score published is below my expectation (This is an appeal for remarking of script, so student will have to attach a Bursary receipt of payment of the fee prescribed by the University for review of examination script).

HOD's Comment &
Signature

Course Lecturer's Comments.....

	YEAR 4 - U2012 SET OF STUDENTS		
S/n	Name of Student	Matric No	Course Advisers
4	LIKO Windom Doossy		Prof. E. G.
1	UKO, Wisdom Bassey	U2012/5565001	Akpokodje Prof. E. G.
2	OSIOBE, Arhuere	U2012/5565002	Akpokodje
		02012/5505002	Prof. E. G.
3	BOLODEOKU Olusegun Samuel	U2012/5565003	Akpokodje
0		02012/0000000	Prof. E. G.
4	ODILI Rachael Tamaratimi	U2012/5565004	Akpokodje
			Prof. J. O. Etu-
5	PATTA, Anthony Lenata	U2012/5565005	Efeotor
			Prof. J. O. Etu-
6	USORO, Ikana Ikpaisong	U2012/5565006	Efeotor
			Prof. J. O. Etu-
7	TIJANI, Ahmed Olayiwola	U2012/5565007	Efeotor
0			Prof. J. O. Etu-
8	EZEKWE, Ikenna Thaddeus	U2012/5565008	Efeotor
9	WORLU, Manuchim Ogechi	U2012/5565009	Prof. N. F. Ukaigwe
10	MAEKAE, Barilumene Obed	U2012/5565010	Prof. N. F. Ukaigwe
11	MEKWA, Favour Anthony	U2012/5565011	Prof. N. F. Ukaigwe
12	NSIRIM, Obuchi Akobundu	U2012/5565012	Prof. N. F. Ukaigwe
13	OKPUNOR, Emeka Joseph	U2012/5565013	Prof. M. I. Odigi
14	AZOLIBE, Chinazo Vina	U2012/5565014	Prof. M. I. Odigi
15	CHUKWUMA, Cyril Chukwuebuka	U2012/5565015	Prof. M. I. Odigi
16	IFEANACHO, Chukwuemeka Daniel	U2012/5565016	Prof. M. I. Odigi
17	DIKE, John Onuoha	U2012/5565017	Prof. V. U. Ukaegbu
18	UDOFIA, Sunday Matthew	U2012/5565018	Prof. V. U. Ukaegbu
19	ELISHA, Victor Ugochukwu	U2012/5565019	Prof. V. U. Ukaegbu
20	USORO, Kubiat Udo	U2012/5565020	Prof. V. U. Ukaegbu
21	ADOWEI, George Rutherford	U2012/5565021	Prof. A. C. Ibe
22	AKPUGO, Stanley Ifeanyi	U2012/5565022	Prof. A. C. Ibe
23	IWUOHA, Charles Ogbonnaya	U2012/5565023	Prof. A. C. Ibe
24	TEKENA, ThankGod George	U2012/5565024	Prof. A. C. Ibe
25	AWUSOR, Kingdom Agbeta	U2012/5565025	Prof. G. J. Udom
26	JOSEPH, Effiong Doubra	U2012/5565026	Prof. G. J. Udom
27	EFONE, Kelly Eniwo	U2012/5565027	Prof. G. J. Udom
28	ALFRED, Nnamdi Joseph	U2012/5565028	Prof. G. J. Udom
29	UYAI, Dickson Usip	U2012/5565029	Dr. A. C. Tse
30	AJOGWU, Ifeanyi Hilary	U2012/5565030	Dr. A. C. Tse
31	IHUOMA, Judith Uchechi	U2012/5565031	Dr. A. C. Tse
32	AJUWA, Mark Anthony	U2012/5565032	Dr. A. C. Tse
33	JAJA, Emmanuel Michael	U2012/5565033	Dr. S. A. Ugwu
34	OGBONNA, Chukwunonyereem	U2012/5565034	Dr. S. A. Ugwu
35	OVWIGHOSE, Rukevwe Malcom	U2012/5565035	Dr. S. A. Ugwu
36	AMADI, Kingsley Chimuanya	U2012/5565036	Dr. S. A. Ugwu
30	TIMADI, NITYSIEY CHIITIUATIYA	02012/0000000	טען. ט. א. Uywu

37	UHAWHA, Ochuko	U2012/5565037	Dr. J. I. Nwosu
38	AYE, Oboro Tamarandiepre	U2012/5565038	Dr. J. I. Nwosu
39	MADU, Ogbonnaya Ugochukwu	U2012/5565039	Dr. J. I. Nwosu
40	OKUK, Juliet Udo	U2012/5565040	Dr. J. I. Nwosu
41	UCHEGBULE, Nnamdi Wokama	U2012/5565041	Dr. N. E. Ekeocha
42	ADIGWU, Henry Chukwuemeka	U2012/5565042	Dr. N. E. Ekeocha
43	PHILIP, Dominic Kingston	U2012/5565043	Dr. N. E. Ekeocha
44	NWEKE, Chiwendu Augustina	U2012/5565044	Dr. N. E. Ekeocha
45	OSAROLUKA, Obariwanenu	U2012/5565045	Dr. N. Egesi
46	IGWE, Ruth Mgbechi	U2012/5565046	Dr. N. Egesi
47	ATOU, Jacob Ditimi	U2012/5565047	Dr. N. Egesi
			Dr. H. O.
48	IGNATIUS, Mmaduabuchi Victor	U2012/5565048	Nwankwoala
			Dr. H. O.
49	ODUM, Chika Sunny	U2012/5565049	Nwankwoala
			Dr. H. O.
50	FIESIN, Paris Tari	U2012/5565050	Nwankwoala
51	ISAIAH, Samuel Nnanna	U2012/5565051	Dr. K. O. Okengwu
52	AMAONYEANAEZE, Emeka Gideon	U2012/5565052	Dr. K. O. Okengwu
53	STEPHEN, Patrick Onyedikachi	U2012/5565053	Dr. K. O. Okengwu
54	NWARU, Nwenekanma Abel	U2012/5565054	Dr. J. N. Onwualu
55	IRO, Ezuma Ahunanya	U2012/5565055	Dr. J. N. Onwualu
56	UBI, Joshua Chukwuma	U2012/5565056	Dr. J. N. Onwualu
57	OYAKHIRE, Emmanuel	U2012/5565057	Dr. A. E. Jones
58	FABIAN, M. Ukpe	U2012/5565058	Dr. A. E. Jones
59	WOBOR, Michael Osisi	U2012/5565059	Dr. A. E. Jones
60	PETERS, Osima Lolo	U2012/5565060	Dr. S. Abrakasa
61	IKEGWUONU, Daniel Nnaemeka	U2012/5565061	Dr. S. Abrakasa
62	COTTEREL, Osaki	U2012/5565062	Dr. S. Abrakasa
63	AMADI, Paul Jonah	U2012/5565063	Dr. F. D. Giadom
64	UMOH, Dennis Ukeme	U2012/5565064	Dr. F. D. Giadom
65	AKUDE, Emeka Emmanuel	U2012/5565065	Dr. F. D. Giadom
66	ANABUIKE, Lilian Chioma	U2012/5565066	Dr. R. U. Ideozu
67	NJOKU, C. Fredrick	U2012/5565067	Dr. R. U. Ideozu
68	IWUOMA, Chioma	U2012/5565068	Dr. R. U. Ideozu
69	ISAH, Suleman Dan	U2012/5565069	Dr. C. U. Ugwueze
70	UDO, Charles Nkereuwem	U2012/5565070	Dr. C. U. Ugwueze
71	AMAYA, Etomi Stephenie	U2012/5565071	Dr. C. U. Ugwueze
72	IKECHI, Chinedu Kyrian	U2012/5565072	Mr. D. C. Okujagu
73	OLUKA, Nteana A.	U2012/5565073	Mr. D. C. Okujagu
74	ETEWU, Edwin Jude	U2012/5565074	Mr. D. C. Okujagu
75	NYONE, John Barilella	U2012/5565075	Mrs. F. I. Nwokocha
76	OSAZUWA, John Abraham		Mrs. F. I. Nwokocha
77	LAWSON, Soala		Mrs. F. I. Nwokocha

YEAR 3 U2013 SET OF STUDENTS

C /	YEAR 3 02013 SET OF STUDENTS		Course A 1 '
S/n	Name of Student	Matric No	Course Advisers
1	WILSON, Ama Emmanuel	U2013/5565001	Prof. E. G. Akpokodje
			Prof. E. G.
2	AGOMUO, Kelechi Peace	U2013/5565002	Akpokodje
3	CHIGOZIE, Ifeanyi Paul	U2013/5565003	Prof. E. G.
5	CHIOOZIE, Healiyi Faul	02013/3303003	Akpokodje Prof. E. G.
4	ENYIAYI, Glory Marckson	U2013/5565004	Akpokodje
~		110010/5565005	Prof. E. G.
5	INEKIGHA, Samson Ayebaikoko	U2013/5565005	Akpokodje Prof. J. O. Etu-
6	TEMURU, Stephen Olotu	U2013/5565006	Efeotor
			Prof. J. O. Etu-
7	EGILEONISO, Endurance Oni	U2013/5565007	Efeotor
8	ONYEMACHI, Chibundu Miracle	U2013/5565008	Prof. J. O. Etu- Efeotor
			Prof. J. O. Etu-
9	NJOKU, Chinemerem Precious	U2013/5565009	Efeotor
10	NWAZURUOKE, Emmanuel Chinonso	U2013/5565010	Prof. J. O. Etu- Efeotor
11	TUNEBARI, Bernard Henerietta	U2013/5565011	Prof. N. F. Ukaigwe
12	OMOKPARIOLA, Elshalom Chioma	U2013/5565012	Prof. N. F. Ukaigwe
13	MILLER, Dhulesh Emmanuel	U2013/5565013	Prof. N. F. Ukaigwe
14	NDUBUISHI, Peter Onwelazu	U2013/5565014	Prof. N. F. Ukaigwe
15	EGWURUGWU, Chisom Chijioke	U2013/5565015	Prof. N. F. Ukaigwe
16	NWONKWO, Bright	U2013/5565016	Prof. M. I. Odigi
17	SUNNY-NSIEGBE, Noble Ozunhanyirichi	U2013/5565017	Prof. M. I. Odigi
18	OPURUM, Loveday Anaelechi	U2013/5565018	Prof. M. I. Odigi
19	ONYIGE, Precious Oby	U2013/5565019	Prof. M. I. Odigi
20	EPELLE, Ngowari Abraham-B	U2013/5565020	Prof. M. I. Odigi
21	AKPABOT, Imo Ifiok	U2013/5565021	Prof. V. U. Ukaegbu
22	MINAYE-ILOMBO, Tamunotonye	U2013/5565022	Prof. V. U. Ukaegbu
23	OMO-EDOKPAYI, Efosa	U2013/5565023	Prof. V. U. Ukaegbu
24	ADEREMI, Ayodimeji Michael	U2013/5565024	Prof. V. U. Ukaegbu
25	OMERE, Chibuike	U2013/5565025	Prof. V. U. Ukaegbu
26	IGWE, Samuel Chukwuma	U2013/5565026	Prof. A. C. Ibe
27	HORSFALL, Evita Omiete	U2013/5565027	Prof. A. C. Ibe
28	OSAMUSALI, Cliton Ikechukwu	U2013/5565028	Prof. A. C. Ibe
29	NATHANAEL, Tonbra Chinyere	U2013/5565029	Prof. A. C. Ibe
30	OJULE, Steven Aruchi	U2013/5565030	Prof. A. C. Ibe
31	ONWUMERE, Judith Akudo	U2013/5565031	Prof. G. J. Udom
32	BENJAMIN, Rita	U2013/5565032	Prof. G. J. Udom
33	HORSFALL, Sominabo Jemina	U2013/5565033	Prof. G. J. Udom

34	OBIOHA, Eustace Nkem	U2013/5565034	Prof. G. J. Udom
35	FRANCIS, Prince Maduawuchi	U2013/5565035	Prof. G. J. Udom
36	MONANU, Chinenye Ijeoma	U2013/5565036	Dr. A. C. Tse
37	EMA, Iberedem Ebong	U2013/5565037	Dr. A. C. Tse
38	OBANOR, Franklyn Osi	U2013/5565038	Dr. A. C. Tse
39	AGOMUO, Uzochi Blessing	U2013/5565039	Dr. A. C. Tse
40	MAAGBO, Barineka Divine	U2013/5565040	Dr. A. C. Tse
41	BONI-ORIJI, Chisom Glad	U2013/5565041	Dr. S. A. Ugwu
42	MBELU, Kene Henry	U2013/5565042	Dr. S. A. Ugwu
43	PETER, Emmanuel Chukwuemeka	U2013/5565043	Dr. S. A. Ugwu
44	ENAWORU, Oghenekevwe	U2013/5565044	Dr. S. A. Ugwu
45	CHINA, Divine Chiemele	U2013/5565045	Dr. J. I. Nwosu
46	AMADI, Isaac	U2013/5565046	Dr. J. I. Nwosu
47	NWIKA, Sonbari John	U2013/5565047	Dr. J. I. Nwosu
48	EWELIE, Joseph Ebuka	U2013/5565048	Dr. J. I. Nwosu
49	AMINI-PHILIPS, Mamanuwa Stephen	U2013/5565049	Dr. N. E. Ekeocha
50	ASHONOFOR, Solomon Emeka	U2013/5565050	Dr. N. E. Ekeocha
51	ORJI, Inocent Ikechukwu	U2013/5565051	Dr. N. E. Ekeocha
52	NJOKU, Glory Osimin	U2013/5565052	Dr. N. E. Ekeocha
53	GEORGE, Hart Junior	U2013/5565053	Dr. N. Egesi
54	OPULAH, Daerefaka	U2013/5565054	Dr. N. Egesi
55	ZIDIRI, Tarila	U2013/5565055	Dr. N. Egesi
56	ONOME, Henry Ogheneovo	U2013/5565056	Dr. N. Egesi
57	OKORIE, Favour Friday	U2013/5565057	Dr. H. O. Nwankwoala
57	OKOKIE, Pavoui Filday	02013/3303037	Dr. H. O.
58	JACK, Kelly Florence	U2013/5565058	Nwankwoala
59	UMOREN, Iniubong Ephraim	U2013/5565059	Dr. H. O. Nwankwoala
57			Dr. H. O.
60	NNUKA, Friday Dika	U2013/5565060	Nwankwoala
61	AMAKIRI, Egenebo Sobarasuaipiri	U2013/5565061	Dr. K. O. Okengwu
62	ADUELA, Shemau	U2013/5565062	Dr. K. O. Okengwu
63	OKANY, Jeremiah Esie	U2013/5565063	Dr. K. O. Okengwu
64	ETIM, Joseph Ini-Obong	U2013/5565064	Dr. K. O. Okengwu
65	ABOTU, Gladys Oghogho	U2013/5565065	Dr. J. N. Onwualu
66	AJOKU, Justice	U2013/5565066	Dr. J. N. Onwualu
67	AKPOGHOMHE, Christopher Oshokhayame	U2013/5565067	Dr. J. N. Onwualu
68	ISOMA, Divine Ezinwa Victory	U2013/5565068	Dr. J. N. Onwualu
69	FYNEFACE, Piriye Joshua	U2013/5565069	Dr. A. E. Jones
70	OGUNBOR, Great	U2013/5565070	Dr. A. E. Jones

71	MORDI, Lizzy	U2013/5565071	Dr. A. E. Jones
72	VELVET, Moddlyn Osemiebi	U2013/5565072	Dr. A. E. Jones
73	EMMANUEL, Chikadibia Eucheria	U2013/5565073	Dr. S. Abrakasa
74	AHUKANNA, Kingsley Chidiebere	U2013/5565074	Dr. S. Abrakasa
75	ANYIGOR, Solomon Emeka	U2013/5565075	Dr. S. Abrakasa
76	WOSU, Prince Cheru	U2013/5565076	Dr. S. Abrakasa
77	OKORO, Dorisann Ozioma	U2013/5565077	Dr. F. D. Giadom
78	UJAGBOR, Nnamdi Kenneth	U2013/5565078	Dr. F. D. Giadom
79	WIHIOKA, Allen Chinonye	U2013/5565079	Dr. F. D. Giadom
80	OBOT, Idiongomfon Reuben	U2013/5565080	Dr. F. D. Giadom
81	OKOROAFOR, Esther Chizoba	U2013/5565081	Dr. R. U. Ideozu
82	UTONG, Ida-awaji Clinton	U2013/5565082	Dr. R. U. Ideozu
83	UMUNNA, Patrick Chinedu	U2013/5565083	Dr. R. U. Ideozu
84	IBOR, Inah Odinta	U2013/5565084	Dr. R. U. Ideozu
85	OMISHADE, Esther Titilope	U2013/5565085	Dr. C. U. Ugwueze
86	AGBOLU, Promise Sobulachi	U2013/5565086	Dr. C. U. Ugwueze
87	PAMILERIN, Christopher Sunday	U2013/5565087	Dr. C. U. Ugwueze
88	DUBE, Dunebari Saturday	U2013/5565088	Dr. C. U. Ugwueze
89	OTOBRISE, Okeoghene Donaldson	U2013/5565089	Mr. D. C. Okujagu
90	ANABUIKE, Clair Chiamaka	U2013/5565090	Mr. D. C. Okujagu
91	WORLUNWOR, Wokeh Eric	U2013/5565091	Mr. D. C. Okujagu
92	UWAKWARIBE, Chinedu Charles	U2013/5565092	Mr. D. C. Okujagu
93	IZUORAH, Chukwudi Isaac	U2013/5565093	Mrs. F. I. Nwokocha
94	AKARUESE, Aboyowa Mosayioritse	U2013/5565094	Mrs. F. I. Nwokocha
95	BUBAH, Precious Simple	U2013/5565095	Mrs. F. I. Nwokocha
96	DAGBE, Onoriode Henry	U2013/5565096	Mrs. F. I. Nwokocha

	YEAR 2 - U2014 SET OF STUDE	ENTS	
		Matriculation	
S/n	Name of Student	Number	Course Advisers
1	Alugbare, Barikpoa Jane	U2014/5565001	Prof. E. G. Akpokodje
2	Chukuibi, Gosple Idadokima	U2014/5565002	Prof. E. G. Akpokodje
3	Anyanwu, Adanna Stephanie	U2014/5565003	Prof. E. G. Akpokodje
4	Airebamen Onohi Victoria	U2014/5565004	Prof. E. G. Akpokodje
5	Dike, Sunday Chile	U2014/5565005	Prof. J. O. Etu-Efeotor
6	ADEBAYO, Samuel Toyosi	U2014/5565006	Prof. J. O. Etu-Efeotor
7	Ojanomare, Emerald Victoria	U2014/5565007	Prof. J. O. Etu-Efeotor
8	Nwadiora, Success Chinedu	U2014/5565008	Prof. J. O. Etu-Efeotor
9	Onyeka, Fancis Otitodirichukwu	U2014/5565009	Prof. N. F. Ukaigwe
10	Obinna, Blossom Chioma	U2014/5565010	Prof. N. F. Ukaigwe
11	Ibhafidon, Juliet Chiamaka	U2014/5565011	Prof. N. F. Ukaigwe
12	Agbirgba Queen Oronne	U2014/5565012	Prof. N. F. Ukaigwe
13	AGATEME, Achojano	U2014/5565013	Prof. M. I. Odigi
14	Odumah, Clinton	U2014/5565014	Prof. M. I. Odigi
15	Aremu, Timothy Remi	U2014/5565015	Prof. M. I. Odigi
16	Donatus, Chigozine Elias	U2014/5565016	Prof. M. I. Odigi
17	Arinze, Marvelious	U2014/5565017	Prof. V. U. Ukaegbu
18	Chukwumah,Claire Adaboi	U2014/5565018	Prof. V. U. Ukaegbu
19	Ugbor, Chinedu Pascal	U2014/5565019	Prof. V. U. Ukaegbu
20	Amachree, Tamunye Shalom	U2014/5565020	Prof. V. U. Ukaegbu
21	Jaja, David Loveday	U2014/5565021	Prof. A. C. Ibe
22	Yeezor, Deborah	U2014/5565022	Prof. A. C. Ibe
23	Ogbugo, Godpower Amadi	U2014/5565023	Prof. A. C. Ibe
24	Amadi, Chizi Erest	U2014/5565024	Prof. A. C. Ibe
25	Nweke, Emmenuel Chiagozie	U2014/5565025	Prof. G. J. Udom
26	Gabriel, King Kudodo	U2014/5565026	Prof. G. J. Udom
27	Godwin, Yinwaibode Sandra	U2014/5565027	Prof. G. J. Udom
28	Idahosa, Joy Oghoghor	U2014/5565028	Prof. G. J. Udom
29	Sunday, Bright Eedee	U2014/5565029	Dr. A. C. Tse
30		U2014/5565030	Dr. A. C. Tse
31	Amini, Samuel	U2014/5565031	Dr. A. C. Tse
32	Ojum, Precious Ifeanyi	U2014/5565032	Dr. A. C. Tse
33	Omoja, Akodi Sanley	U2014/5565033	Dr. S. A. Ugwu
34	Vigara, Michael Ledornubari	U2014/5565034	Dr. S. A. Ugwu
35	Chuku, Sandra	U2014/5565035	Dr. S. A. Ugwu
36	ADEJOH, Mary Enuwa	U2014/5565036	Dr. S. A. Ugwu
37	Mormah, Ayo Uwa	U2014/5565037	Dr. J. I. Nwosu
	Nwakanma, Michael		
38	Ugochukwu	U2014/5565038	Dr. J. I. Nwosu
39	Mokobia, Ifechukwude	U2014/5565039	Dr. J. I. Nwosu

40	Okonkwo, Collins	U2014/5565040	Dr. J. I. Nwosu
41	Okwechime, Peace Ugochukwu	U2014/5565041	Dr. N. E. Ekeocha
42	Odafe, Oghenenyorel Louis	U2014/5565042	Dr. N. E. Ekeocha
43	Young, Arney Femi	U2014/5565043	Dr. N. E. Ekeocha
44	Okuru, Bapakaye Sonnie	U2014/5565044	Dr. N. E. Ekeocha
	Erebura, Barilnyiegia	02014/0000044	
45	Kagbaranee	U2014/5565045	Dr. N. Egesi
46	Owhorji, Miracle Chinwe	U2014/5565046	Dr. N. Egesi
47	Amariri,Ibinabo	U2014/5565047	Dr. N. Egesi
48	Ibeneme, Nkiruka Nnecoma	U2014/5565048	Dr. N. Egesi
	Esomonu, Wisdom		goo.
49	Chukwuebuka	U2014/5565049	Dr. H. O. Nwankwoala
50	Inyabua, Flouish Moobhin	U2014/5565050	Dr. H. O. Nwankwoala
51	Owhorkire, Ifeanyichukwu	U2014/5565051	Dr. H. O. Nwankwoala
52	Ekokotu, Friday	U2014/5565052	Dr. H. O. Nwankwoala
53	Ogbenjuwa, Christy Onma	U2014/5565053	Dr. K. O. Okengwu
	Ekenne, Chinaemerem		
54	Rowland	U2014/5565054	Dr. K. O. Okengwu
55	Isotu, Freeorn Dickson	U2014/5565055	Dr. K. O. Okengwu
56	Udo Emmenuel Patrick	U2014/5565056	Dr. K. O. Okengwu
57	Akhionbare, John Oghoreye	U2014/5565057	Dr. J. N. Onwualu
58	Ezede, Onome	U2014/5565058	Dr. J. N. Onwualu
59	Ekuchey, Ezinne Bennie	U2014/5565059	Dr. J. N. Onwualu
60	Oriagb, Millennial	U2014/5565060	Dr. J. N. Onwualu
61	Sylvanus, Marvellous Martings	U2014/5565061	Dr. A. E. Jones
62	Ogwe, Providence Chizoba	U2014/5565062	Dr. A. E. Jones
63	Williams, David Eze	U2014/5565064	Dr. A. E. Jones
64	Bassey Ndifereke	U2014/5565065	Dr. A. E. Jones
65	Etuk, Nseobong Markson	U2014/5565066	Dr. S. Abrakasa
66	Oduokike, Joshua Emeka	U2014/5565067	Dr. S. Abrakasa
67	Chukwu, Amarachi Vivian	U2014/5565068	Dr. S. Abrakasa
68	Saagberekpee, Radilo	U2014/5565069	Dr. S. Abrakasa
69	Salako, Adekemi Boluwatife	U2014/5565069	Dr. F. D. Giadom
70	Ololoma, Lauretta Alaerebo	U2014/5565070	Dr. F. D. Giadom
71	George, Faithful	U2014/5565071	Dr. F. D. Giadom
72	ABUDU, Precious	U2014/5565072	Dr. F. D. Giadom
73	Ali, Chimenem Lovelin	U2014/5565073	Dr. R. U. Ideozu
74	Offor, Chika Austine	U2014/5565074	Dr. R. U. Ideozu
75	Ekwuribe, Kelechi	U2014/5565075	Dr. R. U. Ideozu
76	Ogunianade, Josiah Ayodele	U2014/5565076	Dr. R. U. Ideozu
77	Onyemaechi, Samuel Emeka	U2014/5565077	Dr. C. U. Ugwueze
78	Hart, Fubara Ibiaso	U2014/5565078	Dr. C. U. Ugwueze
79	Gordon, Emmenuel Henry	U2014/5565079	Dr. C. U. Ugwueze
80	Nnabuife, Anthony Chibuike	U2014/5565080	Mr. D. C. Okujagu
81	Rollings, Abiodun Babatunde	U2014/5565081	Mr. D. C. Okujagu
82	Epiri, Emmenuel Wilberforce	U2014/5565082	Mr. D. C. Okujagu
83	Ukwuteyinor, Eneojo Everst	U2014/5565083	Mrs. F. I. Nwokocha
84	Okonoboh, Williams Osaze	U2014/5565084	Mrs. F. I. Nwokocha

85 John Prince Edet U2014/5565085	Mrs. F. I. Nwokocha
-----------------------------------	---------------------

YEAR 1 - U2015 SET OF STUDENTS

	TEAR 1-02015 SET OF STUDENTS	Mathiculation	
S/n	Name of Student	Matriculation Number	Course Advisers
3/11			Prof. E. G.
1	OGBURU, Ekeoma Kalu	U2015/5565001	Akpokodje
-		02010/0000001	Prof. E. G.
2	ZAGHA, Akeerebari Lenyie	U2015/5565002	Akpokodje
	· · · · · · · · · · · · · · · · · · ·		Prof. E. G.
3	GEORGE, Owanaemi Alakeidiema	U2015/5565003	Akpokodje
			Prof. E. G.
4	OBINNA, Ogechukwu Favour	U2015/5565004	Akpokodje
_			Prof. E. G.
5	UKWU, Chukwuebuka Kingsley	U2015/5565005	Akpokodje
6	ICROCIDI, Nyamanujahi Onyahuahi		Prof. E. G.
0	IGBOGIDI, Nyemanuishi Onyebuchi	U2015/5565006	Akpokodje Prof. J. O. Etu-
7	ENYINDAH, ThankGod	U2015/5565007	Efeotor
-		02010/0000001	Prof. J. O. Etu-
8	EZEBUNWA, Peace	U2015/5565008	Efeotor
	,		Prof. J. O. Etu-
9	AFOLABI, Adebisi Adebowale	U2015/5565009	Efeotor
			Prof. J. O. Etu-
10	ANYAMENE, Joseph Chibueze	U2015/5565010	Efeotor
			Prof. J. O. Etu-
11	DANIEL, Emmanuel Akhigbe	U2015/5565011	Efeotor
12	ICIV/E Justin Chima		Prof. J. O. Etu-
	IGWE, Justin Chima	U2015/5565012	Efeotor
13 14	DAVID, Donald Azebeokha	U2015/5565013	Prof. N. F. Ukaigwe
14	GBOBIE, Angela Zorbari	U2015/5565014 U2015/5565015	Prof. N. F. Ukaigwe
	NWAFOR, Kelechi		Prof. N. F. Ukaigwe
16 17	EROMOSELE Efeose Excel	U2015/5565016	Prof. N. F. Ukaigwe
	IJEOMA, Samuel Chidiebere	U2015/5565017	Prof. N. F. Ukaigwe
18	FYNEFACE, Victoria Chiwendu	U2015/5565018	Prof. N. F. Ukaigwe
19	ESANJUMI, Lambert Sunday	U2015/5565019	Prof. M. I. Odigi
20	IBOH, Sandra Oluchi	U2015/5565020	Prof. M. I. Odigi
21	EZI, Faith Janet	U2015/5565021	Prof. M. I. Odigi
22	WHYTE, Kelechi Jeffery	U2015/5565022	Prof. M. I. Odigi
23	TAGBARE, Barnabas	U2015/5565023	Prof. M. I. Odigi
24	ENAWORU, Oghenero	U2015/5565024	Prof. M. I. Odigi
25	NAALUBE, Bright Nekabari	U2015/5565025	Prof. V. U. Ukaegbu
26	ONOJAMRE, Enaiso Paul	U2015/5565026	Prof. V. U. Ukaegbu
27	NWARIBE, Emeka Osarenti	U2015/5565027	Prof. V. U. Ukaegbu
28	OHAGWA, Chizoba Joan	U2015/5565028	Prof. V. U. Ukaegbu
29	LUCKY, Victor	U2015/5565029	Prof. V. U. Ukaegbu
30	ANYANWU, Ruth Chika	U2015/5565030	Prof. V. U. Ukaegbu
31	AMADI, Golden Chimele	U2015/5565031	Prof. A. C. Ibe

32	NWAALU, Favour Wabaneka	U2015/5565032	Prof. A. C. Ibe
33	MICAH, Dennis Chijioke	U2015/5565033	Prof. A. C. Ibe
34	NDUA, Cynthia Ujunwa	U2015/5565034	Prof. A. C. Ibe
35	OLOWU, Love	U2015/5565035	Prof. A. C. Ibe
36	WIGWE, Emmanuel Ebubechi	U2015/5565036	Prof. A. C. Ibe
37	MBA, Chinyere Jane	U2015/5565037	Prof. G. J. Udom
38	HART WILLIAMS, Joy Tamunomiegbam	U2015/5565038	Prof. G. J. Udom
39	ADARAMOLA, Philip Ayodele	U2015/5565039	Prof. G. J. Udom
40	ENAYAMA, Harrison	U2015/5565040	Prof. G. J. Udom
41	DIBI, Tamunokuro Hope	U2015/5565041	Prof. G. J. Udom
42	DAMIEIBI, Ibiba Sonnyba	U2015/5565042	Prof. G. J. Udom
43	AKPAN, Abasiama Raphael	U2015/5565043	Dr. A. C. Tse
44	AMINAHO, Ndukaegho Sabastine	U2015/5565044	Dr. A. C. Tse
45	WARMATE, Pakiribo Gabriel	U2015/5565045	Dr. A. C. Tse
46	ODOCK, Ransom Nkonang	U2015/5565046	Dr. A. C. Tse
47	TAMUNOKURO, Richmond Anderson	U2015/5565047	Dr. A. C. Tse
47	LETAMBARI, Innocent Destiny	U2015/5565048	Dr. S. A. Ugwu
49	NJOKU, Evans Chukwuka	U2015/5565049	Dr. S. A. Ugwu
50	BABAJIDE, Tolubori Dorcas	U2015/5565050	Dr. S. A. Ugwu
51	OCHOGWU, Ogwuche Joshua	U2015/5565051	Dr. S. A. Ugwu
52	MATTHEW, Joel Oluwafemi	U2015/5565052	Dr. S. A. Ugwu
53	NWAONUALA, Chioma Hope	U2015/5565053	Dr. J. I. Nwosu
54	UGORJI, Collins Ugorji	U2015/5565054	Dr. J. I. Nwosu
55	AMOS, Confidence Chimezie	U2015/5565055	Dr. J. I. Nwosu
56	NWANRO, Dionysius Chukwudi	U2015/5565056	Dr. J. I. Nwosu
57	KUYIK, Ime Kanem	U2015/5565057	Dr. J. I. Nwosu
58	OFURUM, Endurance Oluchi	U2015/5565058	Dr. N. E. Ekeocha
59	IWUAGWU, Chijioke Emmanuel	U2015/5565059	Dr. N. E. Ekeocha
60	AKPAROBORE, Joy	U2015/5565060	Dr. N. E. Ekeocha
61	NNADOZIE, Miracle Makuochukwu	U2015/5565061	Dr. N. E. Ekeocha
62	GODSON, Graham Chikaodinaka	U2015/5565062	Dr. N. E. Ekeocha
63	PETERS, Ajubonyekiya	U2015/5565063	Dr. N. Egesi
64	DIDIAH, Caleb Chibuike	U2015/5565064	Dr. N. Egesi
65	DIMARO, Ajirioghene P	U2015/5565065	Dr. N. Egesi
66	OGUNSANYA, Akinwale Akanni	U2015/5565066	Dr. N. Egesi
67	MICHAEL, Grace Uga	U2015/5565067	Dr. N. Egesi
07			Dr. H. O.
68	ODOM, Martins Nnadozie	U2015/5565068	Nwankwoala
			Dr. H. O.
69		U2015/5565069	Nwankwoala
			Dr. H. O.
70	NNAEMEKA, Chigozie Kingsley	U2015/5565070	Nwankwoala
			Dr. H. O.
71	TOM, Solomon Akelachi	U2015/5565071	Nwankwoala
70	NAISENIM Charles Okases	12015/5565072	Dr. H. O. Nwankwoola
72 73	NAISENIM, Charles Okpoga	U2015/5565072	Nwankwoala
73	KONUGAH, Daniel Major	U2015/5565073	Dr. K. O. Okengwu
		U2015/5565074	Dr. K. O. Okengwu
75	SAMUEL, Kabari	U2015/5565075	Dr. K. O. Okengwu

76	OPURUM, Temple Sopuruchi	U2015/5565076	Dr. K. O. Okengwu
77	OSUOGIM, Elizabeth Quintin	U2015/5565077	Dr. K. O. Okengwu
78	RASAQ, Adams Akande	U2015/5565078	Dr. J. N. Onwualu
79	ZIGAKOLBARI, Tornubari	U2015/5565079	Dr. J. N. Onwualu
80	ADELE, Chima Darlynton	U2015/5565080	Dr. J. N. Onwualu
81	ONUOHA, Kelechi Morrison	U2015/5565081	Dr. J. N. Onwualu
82	MOORE Josephine	U2015/5565082	Dr. J. N. Onwualu
83	OKUJAGU, Fortune Godfrey	U2015/5565083	Dr. A. E. Jones
84	ETIM, Duke Effiom	U2015/5565084	Dr. A. E. Jones
85	CHRISTIAN, Godswill Prince	U2015/5565085	Dr. A. E. Jones
86	BABALOLA, Bamigbade A	U2015/5565086	Dr. A. E. Jones
87	EBELE MUOLOKWU, Ogochukwu Ivy	U2015/5565087	Dr. A. E. Jones
88	AKARI, Precious Faith	U2015/5565088	Dr. S. Abrakasa
89	OTEUMBABIA, Bereni George	U2015/5565089	Dr. S. Abrakasa
90	OHAKA, Moses	U2015/5565090	Dr. S. Abrakasa
91	OLUKAYODE, Mayowa Daniel	U2015/5565091	Dr. S. Abrakasa
92	NWAOBUKPA, Nkemjika Emmanuel	U2015/5565092	Dr. S. Abrakasa
93	YINKERE, Nicole Ebitimi	U2015/5565093	Dr. F. D. Giadom
94	IBIAMA, Tamunosaibibam Golden	U2015/5565094	Dr. F. D. Giadom
95	ANELE, Faith Chinyere	U2015/5565095	Dr. F. D. Giadom
96	SHADRACK, Powei Sunday	U2015/5565096	Dr. F. D. Giadom
97	WOKEM, Onyebuchi Paul	U2015/5565097	Dr. F. D. Giadom
98	OKOROAFOR, Ebuka Lawrence	U2015/5565098	Dr. R. U. Ideozu
99	BASSEY, Unyime Johnny	U2015/5565099	Dr. R. U. Ideozu
100	EJILUGHA, Chineme Charles	U2015/5565100	Dr. R. U. Ideozu
101	AMAONYEANAEZE, Promise Ginika	U2015/5565101	Dr. R. U. Ideozu
102	SAMUEL, Zanne Bolance	U2015/5565102	Dr. R. U. Ideozu
103	ELEBERI, Samuel	U2015/5565103	Dr. C. U. Ugwueze
104	BRIGGS, Ibife Linus	U2015/5565104	Dr. C. U. Ugwueze
105		U2015/5565105	Dr. C. U. Ugwueze
106	CHIDUBEM, Marvin Silas	U2015/5565106	Dr. C. U. Ugwueze
107		U2015/5565107	Dr. C. U. Ugwueze
108	MBAKWE, Nkiruka	U2015/5565108	Mr. D. C. Okujagu
109	BLESSED Francis Inyang	U2015/5565109	Mr. D. C. Okujagu
110	UWEH, Othuke Valentine	U2015/5565110	Mr. D. C. Okujagu
111	HART, Livett Atemie	U2015/5565111	Mr. D. C. Okujagu
112		U2015/5565112	Mr. D. C. Okujagu
113	ANYAOGU Nnamdi Ernest	U2015/5565113	Mrs. F. I. Nwokocha
114	BRAIDE, Ibinabo Igonibo	U2015/5565114	Mrs. F. I. Nwokocha
	NWANKINO, Alexander Chinagorom		
115	Nnanna	U2015/5565115	Mrs. F. I. Nwokocha
116	EKUNWE, Imadeyunuagbon Theresa	U2015/5565116	Mrs. F. I. Nwokocha

BMAS POST GRADUATE PROGRAMMES IN GEOLOGY

Introduction

The Department of Geology commenced academic activities in 1976 at the undergraduate level. However, postgraduate studies did not begin until 1986 with the M.Sc. programme followed by the Ph.D. programme in 1996 while the Postgraduate Diploma in Geology commenced in 2004. The department provides specialized Postgraduate Programmes to meet the needs in oil and solid mineral industries and other public sectors. The Programmes are, at the M.Sc. and Ph.D. levels, organized in Biostratigraphy, Engineering Geology, Environmental Geology, Exploration Geophysics, Hydrogeology, Petroleum Geology, and Sedimentology and Reservoir Geology, Exploration and Mining Geology, Petrology and Applied Geochemistry, and Structural Geology. There is strong emphasis on research in all programs of the department. The training programme is based on the concept of research apprenticeship in which each student's training is, through consultation with the supervisor, adapted to the interest and objectives of the student. The courses offered in the different Programmes are the key to a challenging and satisfying career in the profession both in Nigeria and Overseas. However, since academic programming is not static, the department has seen the need to provide training and re-training opportunities for graduates in line with current developments in the profession. Therefore necessary changes in course contents and expansion in areas of specialization have been introduced. Presently, the Department runs three separate postgraduate Programmes, namely: Postgraduate Diploma (PGD), Master of Science (M.Sc.) and Doctor of Philosophy (Ph.D.).

Philosophy

The philosophy of postgraduate Programmes is anchored on the unbiased and systematic observation, accurate documentation and interpretation of facts and phenomena with a view to generating a body of knowledge.

POSTGRADUATE DIPLOMA IN GEOLOGY (PGDG)

Aim and Objectives

The aims and objectives of the PGDG programme are:

- 1. To train and re-train graduates in the private and public sectors engaged in exploration and exploitation of petroleum, solid minerals, ground and surface water resources, and environmental geology.
- 2. To re-train geologists and other professionals/ scientists wishing to improve their academic records in order to satisfy the prerequisites for admission into professional post graduate degree Programmes.

ADMISSION REQUIREMENTS

The criteria for admission are:

- i) All candidates must have five credit passes including English and Mathematics and two other relevant subjects at O'Level
- ii) Candidates with Bachelors degree from approved university must obtain a Third Class degree in the relevant science discipline as determined by the Department.
- iii) Holders of HND in relevant Programmes from approved institutions with a minimum of Upper Credit may also be considered for admission.

Options in the Programme / Areas of Specialization

There is no option of specialization in the PGDG programme. Students undertake research work based on supervisor's area of interest.

Mode of Study / Duration of Study

Full Time:

The PGDG programme candidate will be required to spend a minimum of 12 calendar months (1 year) and a maximum of 24 calendar months (2 years).

Graduation Requirements

The PGDG degree is awarded after candidates have satisfied their research supervisors that their dissertation based on research is a substantial original contribution to knowledge and have also demonstrated a higher degree of competence in passing of all qualifying examinations based on their course work, and submitting a dissertation embodying the results of their own original research on an approved topic by their supervisor. **PGDG Course Outline**

	FIRST SEMESTER				SECOND SEMESTER	CU
1	PGDG 750.1	The Earth's Resources	2	PGDG 757.2	Igneous and Metamorphic Petrology	2
2	PGDG 751.1	Principles of Stratigraphy	2	PGDG 758.2	Geology of fossil Fuels	2
3	PGDG 752.1	Biostratigraphy	2	PGDG 759.2	Water Resources and Engineering	2

					Geology		
4	PGDG 753.1	Geotectonics	2	PGDG 760.2	Environmental Geology	2	
5	PGDG 754.1	Principles of Geochemistry	2	PGDG 761.2	Field Geology	2	
6	PGDG 755.1	Introduction to Geophysics	2	PGDG 762.2	Seminar	2	
7	PGDG 756.1	Laboratory Methods in	2	PGDG 763.2	Project	4	
		Geology					
	Total Credit Units $= 30$						

Course Description

PGDG 750.1 The Earth's Resources:

The composition and structure of the Earth, rocks, minerals and mineral resources. The geology cycle and geologic time scale, surface processes and products.

PGDG 751.1: Principles of Stratigraphy

Concepts and principles of historical geology, sea level changes in time and space. Stratigraphic relations, stratigraphic classification and nomenclatural procedure, sequence stratigraphy.

PGDG 752.1: Biostratigraphy

Concepts and principles of biostratigraphy, biostratigraphic classification and nomenclatural procedure. Bathymetry paleoenvironment, high-resolution biostratigraphy, forams, pollens and spores.

PGDG 753.1: Geotectonics

Continental drift, sea-floor spreading, plate tectonics. Plate tectonics and origin of basins and structure. Plate tectonics and mineral deposits.

PGDG 754.1: Principles of Geochemistry

Geochemistry of atmosphere, hydrosphere, biosphere and lithosphere, primary geochemical environment, halos, dispersion, pathfinder and indicator elements, geochemical associations, secondary geochemical environments.

The major, minor and trace element geo-chemistry of some common sedimentary, igneous and metamorphic rocks.

PGDG 755.1: Introduction to Geophysics

Electrical conduction and EM induction in rocks, seismic wave propagation, SP, Resistivity, IP and EM surveying techniques, seismic refraction shooting, Geologic interpretation of electrical and EM anomalies and time distance curves. Density, magnetic and gravity surveying.

PGDG 756.1: Field and Laboratory Methods in Geology

Granulometric analysis, Geochemical Methods, Geophysical /hydrogeologic methods, Biostratigraphic methods, Geotechnical methods with emphasis on site investigations for foundations

PGDG 757.2: Introduction to Igneous and Metamorphic Petrology

Igneous and metamorphic rock types and their origins. Their distribution in time and space. Tectonics, economic and mineral affinities.

PGDG 758.2: Geology of Fossil Fuel

Coal genesis, composition and classification, coal distribution in time and space. Nigerian coal origin of petroleum, migration, extraction and production, exploration and exploitation techniques. The Niger Delta.

PGDG 759.2: Water Resources and Engineering Geology

Principles and concepts of hydrogeology/hydrology. Water well drilling and construction, strata log, aquifer and pump test, water cycle and analysis of hydrographs. Physical and chemical properties of water. Water sampling and analytical techniques. Data presentation and analysis. Groundwater pollution. Engineering properties of soils and rocks, geologic hazards in engineering geology, foundations, site investigations.

PGDG 760.2: Environmental/ Economic Geology

Concepts of Environmental geology, geodynamics. Environmental Impact Assessment. Waste disposal and effects on soils and ground water. Geological hazards. Metallic and non-metallic mineral resources; their composition, distribution and uses. Mineral resources of Nigeria. Exploration and exploitation of minerals.

PGDG 761.2: Field Geology

Mapping of sedimentary, igneous and metamorphic terrains. Field note taking and geological report writing. The different sedimentary basins and basement complexes of Nigeria. Stratigraphic evolution of the basins in Nigeria.

PGDG 762.2: Project

Data collection, analysis, interpretation and report presentation of original projects.

PGDG 763.2: Seminar

Seminar report/presentation.

Classification of Certificates for Graduation

The classification shall be as follows:

Class	Cumulative Grade Point Average (CGPA)
Distinction	4.60-5.00
Credit	3.80-4.59
Merit	3.5-3.79
Pass	3.00-3.49

MASTER'S DEGREE (M.Sc.) Programme

The Masters of Science (M.Sc.) programme of the Department of Geology commenced in 1986.

AIMS AND OBJECTIVES

The objectives of the progamme include the following:

- i. To upgrade the knowledge and skills of candidates, and increase their competence as professional geologists to provide manpower in areas of geology in the academia, research institutions, public service and the private sector of the economy
- ii. To enable prospective candidates, have the opportunity to specialize in an area of geologic interest.
- iii. To provide specialized academic knowledge oriented towards research.

Options/ Areas of Specialization in the Programme

- 1. Biostratigraphy
- 2. Engineering Geology,
- 3. Environmental Geology
- 4. Exploration Geophysics
- 5. Hydrogeology
- 6. petroleum Geochemistry
- 7. Petroleum Geology
- 8. Sedimentology and Reservoir Geology.
- 9. Structural Geology
- 10. Sequence Stratigraphy, Utilizing Palynology, Paleontology and Sedimentology
- 11. Remote Sensing
- 12. Exploration and Mining Geology
- 13. Petrology and Applied Geochemistry

Mode of Study / Duration of Study

Full Time:

The M.Sc. programme candidate will be required to spend a minimum of 24 calendar months (2 years) and a maximum of 36 calendar months (3 years).

Graduation Requirements

The M.Sc. degree is awarded after candidates have satisfied the Board of Examiners that their thesis based on research is a substantial original contribution to knowledge and have also demonstrated a higher degree of competence in areas of knowledge related to their specialization. The first requirement is satisfied when candidates have demonstrated a broad knowledge of their field to the satisfaction of the department, normally by completion of all and passing of all qualifying examination for assigned programme of courses with a minimum score of "C". The second requirement is satisfied when candidates have presented and defended a thesis embodying the results of their own original research on an approved topic

M.Sc. Programme Course Outline

S/N	Course Code	Course Title	Credit units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
5	GLY 803.1	Applied Micropaleontology and Palynology	2
6	GLY 804.1	History of Vegetation	2
7	GLY 805.1	Cretaceous-Neogene Mineral Walled Fauna and Flora	2
8	GLY 806.2	Biostratigraphic Applications	2
9	GLY 830.2	Sequence Stratigraphy	2
10	GLY 833.2	Advanced Sedimentology & Basin Analysis	2
11	CGS 802.2	ICT and Research Methodology	2
12	GLY 808.2	Seminar in Geology	2
13	GLY 809.2	M.Sc. Thesis	6
	Total	Credit Units	30

M. Sc Geology: Biostratigraphy Option

S/N	Course Code	Course Title	Credit Units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
5	GLY 807.1	Engineering Geological Properties of Soils	2
6	GLY 808.2	Engineering Geological Properties of Rocks	2
7	GLY 809.2	Foundation Geology/Engineering	2
8	GLY 810.2	Geomechanics & Slope Stability	2
9	GLY 811.2	Engineering and Environmental Geophysics	2
10	GLY 812.2	Special Topics in Engineering Geology	2
11	CGS 802.2	ICT and Research Methodology	2
12	GLY 860.2	Seminar in Geology	2
13	GLY 870.2	M.Sc. Thesis	6
		Total Credit Units	30

M. Sc Geology: Engineering Geology

M. Sc Geology: Environmental Geology Option

S/N	Course Code	Course Title	Credit Units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
5	GLY 807.1	Engineering Geological Properties of Soils	2
6	GLY 817.1	Advanced Geomorphology and Geologic Hazards	2
7	GLY 818.1	Climate Change, Green Energy and Water Resources Sustainability	2
8	GLY 811.2	Engineering and Environmental Geophysics	2
9	GLY 816.2	Contaminant Hydrogeology	2
10	GLY 819.2	Characterisation and Remediation of Contaminated Sites	2
11	GLY 820.2	Environmental Impact Assessment	2
12	CGS 802.2	ICT and Research Methodology	2
13	GLY 860.2	Seminar in Geology	2
14	GLY 870.2	M.Sc. Thesis	6
		Total Credit Units	32

	I	M. Sc Hydrogeology	
S/ N	Course Code	Course Title	Credit Units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
5	GLY 813.1	Water Resources Exploitation & Management	2
6	GLY 811.2	Engineering and Environmental Geophysics	2
7	GLY 814.2	Waste Disposal and Water Pollution	2
8	GLY 815.2	Groundwater Flow and Modelling	2
9	GLY 816.2	Contaminant Hydrogeology	2
10	GLY 818.2	Climate Change, Green Energy and Water Resources sustainability	2
11	CGS 802.2	ICT and Research Methodology	2
12	GLY 860.2	Seminar in Geology	2
13	GLY 870.2	M.Sc. Thesis	6
15	021 0/0.2		
	Tota	Credit Units	30
3.4			30
		Exploration Geophysics Option	C 114 14
<u>S/N</u>			Credit unit
1	CGS 801.1	Management and Entrepreneurship	2 2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
5	GLY 821.1	Magnetic and Gravity Methods (Potential Field Methods)	2
6	GLY 822.1	Seismic Method of Exploration	2
7	GLY 823.1	Mineral deposits and Electrical Methods	2
8	GLY 824.2	Filter Theory and Signal Processing	2
9	GLY 825.2	Wireline Log Interpretation	2
10	GLY 826.2	Petroleum Resources	2
11	GLY 828.2	Sequence Stratigraphy	2
12	CGS 803.2	ICT and Research Methodology	2
13	GLY 860.2	Seminar in Geology	2
14	GLY 870.2	M.Sc. Thesis	6
		Total Credit Units	32
		etroleum Geology Option	
S/N			Credit units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2 2
5		GLY 803.1 Applied Micropaleontology and Palynology	
6	GLY 822.1	GLY 822.1 Seismic Method of Exploration	
7	GLY 826.1	GLY 826.1 Petroleum Resources	
8	GLY 827.1		
9	GLY 828.2		
10	GLY 829.2	Reservoir Characterization and Modelling	2
11	GLY 836.2	Petroleum Geochemistry of Nigeria Basins	2
12	CGS 802.2		2
13	GLY 860.2	Seminar in Geology	2
14	GLY 870.2	M.Sc. Thesis	6
14	011 070.2		*

M. Sc Geology: Sedimentology and Reservoir Geology Option

S/N	Course Code	Course Title	Credit units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
5	GLY 803.1	Applied Micropaleontology and Palynology	2
6	GLY 822.1	Seismic Method of Exploration	2
7	GLY 826.1	Petroleum Hydrocarbons	2
8	GLY 827.1	Advanced Sedimentology & Basin Analysis	2
9	GLY 828.2	Sequence Stratigraphy/	2
10	GLY 829.2	Reservoir Characterization and Modelling	2
11	GLY 830.2	Carbonate and Siliciclastic Deposits	2
12	GGS 802.2	ICT and Research Methodology	2
13	GLY 860.2	Seminar in Geology	2
14	GLY 870.2	M.Sc. Thesis	6
		Total Credit Units	32

M.Sc. Organic Geochemistry option

S/N	Course	Course Title	Credit
	Code		Unit
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology and Geotectonics	2
3	GLY 801.1	Geo-information and Remote Sensing	2
4	GLY 802.1	Field Geology	2
5	GLY 831.1	Source Beds & Reservoir Geochemistry	2
6	GLY 832.1	Biomarker Geochemistry	2
7	GLY 833.1	Coal Deposits	2
8	GLY 834.2	Oil Spills and Remediation	2
9	GLY 835.2	Geochemical Methods	2
10	GLY 836.2	Petroleum Geochemistry of Nigeria Basins	2
11	CGS 802.2	ICT and Research Methodology	2
12	GLY 860.2	Seminar in Geology	2
13	GLY 870.2	M.Sc. Thesis	6
TOT	AL		30

M.Sc. Exploration and Mining Geology

S/N	Course Code	Course Title	Credit units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
5	GLY 837.1	Ore Deposits, Non-Metallic and Industrial Minerals	2
6	GLY 838.1	Economic Mineral Deposits of Nigeria	2
7	GLY 839.1	Mineral Exploration Geochemistry & Geophysics	2
8	GLY 840.2	Geologic Exploration, Mining and Mineral Processing	2
9	GLY 841.2	Mineral property Evaluation and Economics	
10	GLY 847.2	Advanced Sampling, Rock and Mineral Analysis	2
11	CGS 802.2	ICT and Research Methodology	2
12	GLY 860.2	Seminar in Geology	2
13	GLY 809.2	M.Sc. Thesis	6
]	Cotal credit units	30

S/N	Course Code	Course Title	Credit
			units
1	CGS 801.1	Management and Entrepreneurship	2
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2
3	GLY 801.1	Remote Sensing and Geo-Information	2
4	GLY 802.1	Field School	2
	GLY 842.1	Advanced Mineralogy and Crystal Chemistry of Silicate Minerals	2
6	GLY 843.1	Advanced Optical Mineralogy and Ore Microscopy	2
7	GLY 844.2	Advanced Techniques in rock crystallization-deformation analysis	2
8	GLY 845.2	Advanced Igneous and Metamorphic Geochemistry	2
9	GLY 846.2	Advanced Igneous and Metamorphic Petrology	2
10	GLY 847.2	Advanced Sampling, Rock and Mineral Analysis	2
11	CGS 802.2	ICT and Research Methodology	2
12	GLY 808.2	Seminar in Geology	2
13	GLY 809.2	M.Sc. Thesis	6
		Total Credit Units	30

M.Sc. Petrology and Applied Geochemistry Option

M. Sc Geology: Structural Geology

	M. Se Geology: Stilletural Geology				
S/N	Course Code	Course Title	Credit Units		
1	CGS 801.1	Management and Entrepreneurship	2		
2	GLY 800.1	Advanced Structural Geology & Geotectonics	2		
3	GLY 801.1	Remote Sensing and Geo-Information	2		
4	GLY 802.1	Field School	2		
5	GLY 820.1	Advanced Geomorphology	2		
6	GLY 851.1	Applied Structural Models	2		
7	GLY 852.2	Geotectonics	2		
8	GLY 832.2	Fabrics And Structural Analysis	2		
9	GLY 854.2	Geomechanics And Fault Modelling	2		
10	GLY 855.2	3D Structures: Techniques and Visualisation	2		
11	GLY 856.2	Nigeria Sedimentary Basins and their Structures	2		
12	CGS 802.2	ICT and Research Methodology	2		
13	GLY 808.2	Seminar in Geology	2		
14	GLY 809.2	M.Sc. Thesis	6		
		Total Credit Units	30		

Course Description

CGS 80.11 Management and Entrepreneurship 2 units

The course will cover business environment, general management, financial management, entrepreneurship development, feasibility studies, marketing and managerial problem solving

CGS 802.2 ICT and Research Methodology 2 units

Essentials of spreadsheets, internet technology, statistical packages, Precision and Accuracy of Estimates, Principles of Scientific Research. Concepts of hypotheses formulation and testing. Organization of Research. Technical writing/Research report writing (resumes, abstracts, proposals).

Oral and written communication skills in geosciences. Presentation skills using PowerPoint

Scientific research conceptual framework including empirical methods, innovative techniques and improvisation. Earth science technology life cycle and emerging research techniques. Internet research and search tools including web directories and external linkages. Modern field methods in earth science research. Geologic workstation and field data analysis, evaluation and interpretation. Advanced laboratory techniques including bench-scale, tools kits and modern methods.

Research instrumentation types in the earth sciences. Instrumentation methods, calibration, measurement and validation of data. Geologic data processing and quantitative analysis including geostatistical analysis, mathematical modeling and operations research. Application of geologic software in advanced modeling methods. Application and interpretation of phase diagrams and geologic data plots.

Research project costing and value of experimentation. Advanced research project reporting format and synthesis. Participatory approach to external linkage support for advanced geologic field and laboratory research.

Development, demonstration and deployment of earth science research data. Research data security, privacy policy, patents and disclaimers.

GLY 800.1 Advanced Structural Geology

Structures and fabrics of rocks, stress, strain, deformation Mechanism. Various terrain mapping techniques, stereo plots, structures, boreholes / subsurface problems. Terrain analysis. Application of structural geology and aero geology in various areas of applied geology.

GLY 801.1 Geo-Information, Remote Sensing

Principles of remote sensing in determination of natural resources. Fuel, metallic and non-metals. Geoinformatics technology. Relationship between remote sensing and Geo-informatics.

GLY 802.1: Field School

One week devoted to mapping of sedimentary, igneous or metamorphic terrains with emphasis on problems relating to area of specialization of the student. Detailed field mapping of area of interest in any of the different sedimentary basins and Basement Complexes of Nigeria. Students must demonstrate clear understanding of field geology, including measurements, field documentation, report writing, production and submission of a comprehensive geologic map of the area under investigation

GLY 803.1: Applied Micropaleontology and Palynology

Qualitative and quantitative data and their importance. Statistical and other mathematical based faunal and floral species distribution. Stratigraphic climatic studies based on cooling direction and fauna morphological variations. Relative sedimentation rates. Absolute sedimentation rates. Changes in sea level. Paleobathymetry. Foraminifera number and planktonic test porosity. Trace elements and palaeosalinity. Displaced faunas. Biologic and hydrologic indicators. Stratigraphy and correlation pollution.

GLY 804.1 History of Vegetation.

. Quaternary paleontology and palynology. Organisms and plants and their environment.

GLY 805.1 Cretaceous to Neogene Mineral-walled Fauna and Flora

Morphology, classification, distribution history from Cretaceous to Neogene of foraminifera, ostracods, diatoms, radiolaria, coccoliths, etc.

Morphology, classification, distribution history from cretaceous to Neogene of pollen spores, Dinoflagellates, aeacritarchs, chitinozoa, miscellaneous algae.

GLY 806.1 Biostratigraphic Applications

Lithostratigraphy, biostratigraphy, correlation, zonation, paleontological; and palaeobathmetric reconstructions. Assessment of environment quality; forensic art and history studies. Techniques of sample (coal, limestone, sandstone and shale) preparation and in microscopy. The examination and description of typical assemblages of pollens, spores dinoflagellates, foraminifera, etc.; from selected horizons; classification of mixed assemblages into species; statistical analysis involving polynofacies analysis and abundance and classification of micro fossils. Preparation of single mounts and sections and the study of bibliographies, indexes and other relevant literature.

GLY 807.1 Engineering Geological Properties of Soils

Particulate nature of soils, stresses and deformation, geotechnical Index properties Mechanical properties, fleer resistance, compressibility and permeability laterites and wetland soils. Engineering description and classification of rocks. Elasticity and strength properties. Weathering and discontinuities, laboratory testing

GLY 808.1 Engineering Geological Properties of Rocks

In this module, students are introduced to issues in engineering geology that they are likely to encounter working within the applied geo-environment sector. This includes rock description, site investigation and geotechnical assessment, design of ground models, slope design and underground openings, and the impact of groundwater on rock mass strength and slope stability

GLY 809.1 Foundation Geology / Engineering

Foundation principles and practices. Bearing capacity of shallow and pile foundations. Settlement and stability calculations. Foundation improvements. Site investigation techniques. Foundation geology of dams, bridges and large buildings.

GLY 810.2 Geomechanics and Slope stability

Mass movement. Mechanics of slope failure. Classification of slope failures. Cuts and tunneling. Methods of slope stability analysis

GLY 811.2 Engineering and Environmental Geophysics

Use of applied geophysical techniques for environmental, geotechnical and groundwater investigation. Common geophysical methods; electrical resistivity, electromagnetic, seismic down- hole geophysical logging case histories. (These should include, but not limited to Shallow seismic refraction methods and application to dam sites, highways, depth of weathering and material quality). Electrical methods and application to determination of depth to bedrock, location of water table and salt water intrusion. Magnetic, electromagnetic and gravity methods as applied to engineering problems. Geophysical well logging. Aerogeological mapping/ studies and application to Engineering Geology and Hydrogeology).

GLY 812.2 Special Topics in Engineering Geology

This is a selection of topics to deal with those not normally covered in specified courses. Topics also to cover emerging issues in the application of geology in civil engineering practice.e.g. Geological Models and Ground Investigation where students are introduced to issues in engineering geology that they are likely to encounter working within the applied geo-environment sector. This includes rock and soil description, site investigation and geotechnical assessment, design of ground models, slope design and underground openings, and the impact of groundwater on rock and soil mass strength and slope stability

GLY 813.1 Water Resources Exploitation and Management

Analysis of aquifer tests. Behaviour of aquifer-aquitard systems. Aquifer exploration. Recharge and discharge equilibrium. Safe yield estimation of water resources. Regional planning, development and management of water resources for domestic, industrial and agricultural uses. Conjugative use of surface and groundwater. Effects of excessive groundwater withdrawals.

GLY 814.2 Waste Disposal and Water Pollution

Types of waste and disposal management methods. Waste reduction; landfill management methods. Geological and geotechnical factors affecting selection of disposal sites for domestic, industrial hazardous radioactive waste. Measures to prevent pollution

GLY 815 Groundwater Flow, Hydrogeochemistry and Modelling

Physical and mathematical principles of porous media flow with emphasis on groundwater. The continuum concept. Equations of motion and continuity. Confined and unconfined flow. Principles of regional groundwater flows. Hydrogeochemistry and groundwater quality. Sources and transportation of contaminant. Application of modelling in groundwater studies

GLY 816.2 Contaminant Hydrogeology

Characterization of aquifers. Mineral and hydrodynamic properties influencing flow of contaminant in earth materials. Dispersion theory and modeling of pollutants in aquifers. Water quality and protection.

GLY 817.1 Advanced Geomorphology and Geologic Hazards

The course focuses on Geomophological process and the effects of landform alterations by human activities. Erosion, landslides, flooding and allied processes. Coastal and river processes and management of these processes. Plate Tectonics. Geologic hazards to include Earthquakes, Volcanism, Erosion, Mass movement, Flooding etc

GLY 818.1 Climate Change, Green Energy and Water Resources Sustainability

Carbon Cycle. Greenhouse Effect and Global warming. Climate Change: Natural and anthropogenic causes. Effects. United Nations Protocols and Conventions on Climate Change. Green Energy sources. Climate change and water resources.

GLY 819.2 Characterisation and remediation of Contaminated Sites

Conceptual site model and characterisation. Contaminated land legislation, risk assessment Evaluation of the occurrence, nature and magnitude of contamination at a site; Evaluation of transport mechanisms and migration pathways of contaminants. (diffuse contamination, NAPLs,) site investigation, and monitoring; groundwater protection by barriers and land use planning; groundwater remediation methods. Remediation Technologies

GLY 820.2 Environmental Impact Assessment

Definition and rationale for Impact Assessment. Components of International Standard Impact Assessments. Biophysical, Health, and Social Impact Assessments. Impact prediction, Impact Management and Monitoring Plans. Stakeholder involvement.

GLY 821.1: Magnetic and Gravity Methods

Inverse square law. Terrestrial gravity and magnetic fields. Gravimeters and magnetometers. Planning and operation of field surveys. Data reduction. Interpretation- Resolution, Limiting formula, Ambient, mass estimation, Fields and depth rules for geometric models. Computation of anomalies, reduction to pole and remanat magnetism. Aeromagnetic surveys. Element of potential field theory- conversion field – scalar potential. Laplace Equation. Magnetic Scalar potential. Poisons formula relating magnetic and gravitational fields, inversion, Planning and execution of gravity surveys. Reduction of results. Interpretation and modeling. Case histories for petroleum and mineral exploration.

GLY 822.1: Seismic Methods

Propagation of seismic pulse, refraction and reflection. Pulse generation. Seismic recording instruments. Planning and operation of field surveys. Data acquisition, reduction and processing. Velocity determination. Refraction and reflection surveys. Preparation of time and geological sections. Bright spots.

Theory and practice of seismic refraction method. Seismic wave propagation through earth materials. Acquisition of seismic data, field procedures and instrumentation and total system performance. Refraction interpretation methods: simple 2D refraction interpretation from shallow seismogram. Refraction interpretation for horizontal, dipping and irregular surfaces. Blind and hidden layer problems. Refraction interpretation methods; state and dynamic corrections, velocity determinations from profiles and well-shots, reflection coefficients, dipping reflections. Computation exercises and stratigraphy; seismic mapping techniques. Case histories.

GLY 823.1 Mineral deposits and Electrical Methods

Electrical Properties Associated with Rocks. Direct- Current Resistivity Methods Varying Current Methods, Resistivity Method: Resistivity Profiling, Resistivity Depth Sounding. Electro-Magnetic Methods. Very low Frequency (VLF) Radiation, VLF Instruments and Presentation of VLF Results. Natural and Controlled-Source Audio-magnetotelluric

GLY 824.2 Filter Theories and Signal Processing

Wave forms and spectra; Fourier and Fast Fourier transform, digital signals, linear filters; convolution, autocorrelation and cross correlation and power spectrum analysis. De-convolution. Wiener matched filters and application of these filters to both synthetic and real data.

GLY 825.2: Wire Line Log Interpretation

Well-logs. Different types of log. Log patterns for different rock types. Interpretation of environment by means of well-logs.

GLY 826.1 Petroleum Resources

Course is designed to cover both conventional and unconventional hydrocarbons with emphasis on recent advances in the genesis of petroleum hydrocarbons and their application to petroleum exploration and exploitation. Composition, Origin, Migration, Maturation and Geochemistry of Petroleum generation and depths of burials, time, temperature and composition of sedimentary organic matter. Clay and carbonate diagnesis and roles in Petroleum Generation. Abnormal formation pressures. Reservoir rocks and traps. Petroleum hydrogeology. Other hydrocarbon resources including oil shales, bitumen, asphalt, tar sand and coal. Concept of Reserves and Resources and their classification

GLY 827.2 Advanced Sedimentology and Basin Analysis

Carbonate and Clastic Sedimentology. Origin, growth and classification of basins. Analysis of Sedimentary facies and environments (continental margin, shallow and deep marine) of petroleum. Facies control on hydrocarbon distribution. Trap classification. Paleogeographic principles and exploration and exploitation of petroleum. Porosity and Permeability and exploitation of petroleum. Porosity and Permeability and exploitation of petroleum. Borehole geophysical logging. Geology of some of the world's giant oil/ gas field and basins. Regional patterns of petroleum distribution.

Time span involving stratigraphic range and possible worldwide megasequence; geometry and basin type including shape, area, volume, and maximum thickness; sedimentology including kinds, proportions, distribution and composition of lithic fill and paleocurrents for interpreting integrated depositional systems; structure style

(pre-depositional, syn-depositional and post- depositional). Tectonic setting; paleoclimate; thermal burial history; economic interest

GLY 828.2: Sequence Stratigraphy

Basic concepts of sequence stratigraphy. Definition of key terms, Basin fill model, Strata patterns and strata termination patterns. Their geological interpretation and their relation to relative changes of sea level (base level). Interpreting sequences and system tracts from strata discontinuity and their relation to relative changes of sea level (base level).

GLY 829.2: Reservoir Characterization and Modeling

Subsurface faces analysis, subsurface diagnosis of sedimentary environments from cores, ditch cuttings and wire line logs and the use of this knowledge in the prediction of the distribution, geometry and orientation of reservoir rocks. Petrography of reservoir rocks, morphology and genesis of porosity and its relationship to rock composition. Texture and Diagenesis. Description and analysis of reservoir rocks from cores and ditch cuttings.

GLY 830.2 Carbonate and Siliciclastic Deposits

Origin and classification of Carbonates, Siliciclastics and Evaporites

GLY 831.1 Source Bed and Reservoir Geochemistry

Origin, Discovery and Geochemistry of Crude Oil. Organic matter evolution, Diagenesis, catagenesis, metagenesis and metamorphism. How oil forms, natural hydrocarbons. Hydrocarbon migration. Biomarker chemistry and technology. Geochemical markers in crude oil. Application of biomarkers, pristine, phytone, terpenoids, etc. Chemistry of crude oil: Classification and characterization, Base oil, ternary diagrams etc. Chemical oil production. Drilling fluids completion and workover fluids, drill-in fluids, etc. Gaseous hydrocarbons: Development of natural Gas, Types of natural gas accumulation.

GLY 832.1 Biomarker Geochemistry

Introduction to biomarkers, classes of biomarker, isoprenoids, steroids, hopanoids, aromatic hydrocarbons, nonhydrocarbon biomarkers. Biomarkers in sediments. Application of biomarkers in petroleum geochemistry: biological sources, maturity.

GLY 833.1 Coal Deposits

Types of dispersed organic detritus. Distribution of particular organic matter in the sedimentary basins and degree of metamorphism. Basic notions of organic matter petrography. Transmitted and reflected white light microscopy, fluorescence, microscopy, organic matter origins, kerogen and maceral classifications, organic facies, Rock-Eval pyrolysis, ternary diagrams, fluorescence preservation scale, TOC and grain size. Kerogen - Maturity and Type How do we analyse kerogen? Principal kerogen types and evolution paths of kerogen, Kerogen composition and relationship to petroleum potential, Overview of diagenesis, catagenesis and metagenesis. Catagenesis- from kerogen to petroleum, Geothermal gradient - what are the factors that control it? Principal zone of oil generation. Effects of temperature and pressure on kerogen stability and petroleum generation. Metagenesis and gas generation. What do we mean by thermal history? Relationship between thermal history and petroleum generation. Vitrinite reflectance, Vitrinite reflectance and maturity, Vitrinite reflectance interpretation, Palynomorph colour.

GLY 834.2 Oil Spills and Remediation

Composition of crude oil and some petroleum products and naturally occurring hydrocarbons. Sources of hydrocarbon spillage in the environment. Polycyclic aromatic hydrocarbons – their origins, properties and effects. Oil spill remediation and minimization of their impact. Hydrocarbon toxicity, determination and the effects of hydrocarbon pollution in the environment. Case studies of actual oil spills, including the effects of public perception on actions for the treatment of petroleum pollution. Atmospheric pollutants arising from the use of petroleum products as fossil fuels, their effects and their minimization

GLY 835.2 Geochemical Methods

Sampling design and sample preparation (clean and crush), Extraction of rocks, Introduction to fractionation of bitumen, Liquid column chromatography-Thin layer chromatography, Principles, nomenclature and types of Chromatography, Frontal analysis, displacement method, elution development.

GLY 836.2 Petroleum Geochemistry of the Niger Delta Basins

Location of Niger Delta Basin, structural evolution & geology, stratigraphy and geological history, facies and environments, source rocks, reservoir rocks, cap rocks, concept of petroleum systems, exploration history. Calculating the volumetric oil yield of a given body of source rock. Source rock heterogeneity and varying maturation. Producing a source rock report.

GLY 837.1 Ore Deposits, Non-Metallic Minerals and Industrial Materials

Identification of fluid inclusions; theoretical basis for studying fluid inclusions; Fluid inclusion population types; Ore bearing fluids (magmatic, metamorphic and meteoric fluids, thermal springs); determination of homogenization of freezing temperatures of fluid inclusions; use of fluid inclusion studies to determine the role of fluids in geological processes; use of fluid inclusion studies in geothermometry; origin of ore deposition; provinces of metallogeny; types of ore deposits and ore deposition in geochemical cycle; structural environment of ore deposition. Geological criteria for occurrence of ores in Nigeria. Case histories of selected metallic mineral deposits.

Classification; processes of formation and geological environment of the non-metallic minerals and building materials (crushed rocks, sand, gravels, etc.; carbonates, evaporites, asbestos, clays, etc.); methods of prospecting, processing and use in the industry; Occurrences in Nigeria.

GLY 838.1: Economic Mineral Deposits of Nigeria

Geochemical and geophysical methods of mineral exploration. General geology of Nigeria. Mineral exploration projects and methods of exploration in Nigeria; metallogenic provinces -in Nigeria. Geology of non-metallic and metallic mineral deposits of Nigeria. Mining methods, production and marketing of minerals in Nigeria.

GLY 839.1: Mineral Exploration Geochemistry and Geophysics

Dispersion patterns of elements; elemental associations; pathfinders; background; anomaly; geochemical province; exploration geochemistry sequence; geochemical survey, mapping, sampling, analyses of samples; trace element analysis; geochemical drainage survey; heavy mineral prospecting; geochemical soil surveys; vegetation surveys (biogeochemical and geobotanical methods); lithogeochemical surveys; geochemical surveys in Nigeria; environmental geochemistry; Field and Laboratory analytical methods; Statistics in Exploration Geochemistry. Principles and application of magnetic, gravity, electrical, electromagnetic, seismic and radioactive methods of exploration for economic mineral deposits.

GLY 840.2 Geologic Exploration, Mining and Mineral Processing

The idea of mineral prospecting and exploration. Exploration indicators. Stages in exploration process. Exploration philosophy and management. Grid setting, borehole drilling and prospect generation. Ore reserve estimation. Environmental and legal issues in mineral prospecting and exploration. Cut-off grade estimation and its relation to reserve estimation. Planning of exploration Programmes.

The meaning of mining engineering; branches of mining; mining methods and systems. Mining equipment selection- and mine parameter estimation; environ-mental and legal issues in mining operations; elements of mine planning and design; mineral processing basics; mine unit operations.

GLY 841.2 Mineral Property Evaluation and Economics

The subject matter of mineral evaluation. Production rate estimation and scheduling; cash flow development; capital cost estimation. The time value of money. Discounted cash method and its application in mineral evaluation. Estimation of net present value and internal rate of return. Sensitivity analysis in mineral evaluation. Hoskold's formula and its inadequacies. Break-even analysis. Internationally traded minerals. The demand function in mineral economics.

GLY 842.2: Advanced Mineralogy and Crystal Chemistry of Silicate Minerals

Silicate structures; chemistry, and optical and other properties of silicate minerals as well as their assemblages in common igneous rocks.

GLY 843.2: Advanced Optical Mineralogy and Ore Microscopy

Optical determinations of minerals under transmitted and reflected light; four-axis U-stage techniques; use of Ustage in petrofabrics; determination of composition of some silicate minerals by optical methods. Microscopic determinations of ore minerals; Etch reactions; micro-chemical testing of polished sections; ore petrology; introduction and practice of fluid inclusion studies.

GLY 844.2: Advanced Techniques in rock crystallization-deformation analysis

Structural control of a dyke's intrusion; relationships of flowing structures; deformation (differences, associations); structural analysis of a synkinematic intrusion and its relations with the surrounding rocks; "Syncooling" deformation of a granite and associated structures; C axis analysis using a universal stage as

biotite-quartz-amphiboles; "Post-cooling" deformation of a granite and associated structures – related tension gashes and crystallization (micro pull apart structures); structural control of volcanism. Concept of ante-syn-post kinematic crystallization; analysis of ante-syn-post crystallization; rotational criteria of non-coaxial deformation; study of the plastic deformation of quartz; statistical analysis of C axis fabric of quartz under cross Nichols; statistical analysis of C axis fabric of quartz; conditions of crystallization using C axis fabric of quartz as a rational criterion of non-coaxial deformation.

GLY 845.2: Advanced Igneous and Metamorphic Geochemistry

Advanced treatment on Phase Equilibria and the practical use of phase Equilibria; eutectics and solid solutions; theoretical crystallization curves; mafic and intermediate magmas; felsic magmas; effect of pressure on differentiation; origin of basaltic and granitic magmas; problem of trace element distribution in igneous rocks. Rules of distribution; examples of minor-element distribution; regularities of distribution in igneous rocks; rare earth elements; Geochemistry of some selected rock suits in various parts of the world and in Nigeria. Metamorphism as a geochemical process; phase Equilibria in metamorphism; distribution of trace elements in metamorphic rocks; behaviour of trace elements during metamorphic recrystallization. Rare earth elements.

GLY 846.2 Advanced Igneous and Metamorphic Petrology

Igneous fractionation process and compositional variation of magmas; petrography of volcanic rocks; experimental works on natural basaltic and allied rocks; water-bearing basic rock systems; compositionallyzoned magma bodies and their bearing on crystal settling; petrography of plutonic rocks; interpretation of data for plutonic rocks; trace elements in igneous processes and use of isotope in petrology; petrography aspects of lunar rocks and meteorites. Advanced study of pyroclastic rocks, carbonatites, alkaline and peralkaline rocks, spillites, lamprophyres and kimberlites; igneous processes and metallogenesis; petrographic provinces of the world.

Evolution of metamorphic rocks with emphasis on phase Equilibria; fundamental metamorphic changes in rocks; thermal, dynamothermal, dynamic and regional metamorphism; metasomatism, metamorphic fabrics macro- and micro-fabrics); geometric and thermodynamic treatment of metamorphic mineral assemblages; metamorphism and metalogenesis; metamorphic belts of the world and metamorphic processes; trace element behaviour during metamorphic; metamorphism in West Africa with emphasis in Nigeria

GLY 847.2 Advanced sampling, Rock and Mineral Analysis

Selection of sampling locations, sampling methods, patterns and density. Sample preparation for analysis by XRF, XRD, gravimetric and spectrographic methods; presentation of data and statistical representation; principles and application of electron probe, electron microscopy and other analytical methods; density determination and analyses by transmitted and reflected microscopy; mineral separation techniques; recalculation of analyses and representation of chemical data in diagrammatic forms. Mathematical treatment and application of geostatistics in sampling error analysis.

GLY 848.1 Applied Structural Models

Concepts of structural deformation in outcrop and subsurface data. Structural models, fault growth and interactions of faulting and folding. Integration of class based teaching with field examples of both compressional and extensional systems.

GLY 849.1 Geotectonics and Basin Evaluation

Large scale tectonics and geodynamic processes in both extensional and compressional systems. Lithospheric extension, models of continental extension, influence of stretching factors and implications on heat flow. Field component on the influence of lithospheric compression on basin evolutions to address large scale processes.

GLY 850.2 Fabrics and Structural Analysis

Geometric, kinematic and dynamic analysis of structures produced by deformation. Stress and the origin of faults, brittle and ductile strain in rocks. Extensional strike – slip and compressional structural associations. Regional structure, orogens and crustal tectonics. Laboratory exercises include structural interpretation for mineral exploration, stereographic techniques for structural analysis and the study of rock fabrics.

GLY 851.2 Geomechanics and Fault Modelling

The impact of stress, deformation and brittle failure of rocks in the upper crust, along with how these impact fracture systems, rock strength and failure, and microscale fault deformation using the Scanning Electron Microscope. Use of Petrel in 3D modelling.

GLY 852.2 3-D Structure: Techniques and Visualization

Analysis of stereographic data, reducing of geological maps and construction of accurate cross sections. Exercises on how to develop 3D and 4D thinking of complex geological setting through paper based exercises to work station based exercises.

GLY 856.2 Nigeria Sedimentary Basins and their Structures

GLY 860.1 Seminar in Geology

The student is required to present a seminar based either on his/her research project or any chosen subject in geology after an in-depth study through either extensive literature survey and / or data analysis and data interpretation.

GLY 870.2 M.Sc. Thesis

•

An independent study of a geological problem in the student's area of interest, utilizing laboratory analysis, data interpretation and the preparation of a geologic report.

DOCTOR OF PHILOSOPHY (Ph.D.) PROGRAMME

AIM AND OBJECTIVES

The primary objective of the Ph.D. progamme is the accomplishment of independent and original research work which is reported in the form of a dissertation. Complementary to this is the completion of a suitable course work programme, passing a qualifying examination and receiving a satisfactory review on the recommendation of a supervisor.

The Ph.D. degree programme in Geology is designed to provide specialized academic knowledge oriented research. At the end of the training successful candidates would have been able to upgrade their knowledge and skills, and increase their competence as Professionals Geologist to provide manpower in areas of geology in the academia, research Institutions, Public Service and the Private Sector of the Economy.

Regulation

The Ph.D. programme shall consist of course work, seminars and research as approved by the Senate of the University of Port Harcourt.

Admission Requirement

In order to be admitted to Ph.D. candidacy, applicants must have demonstrated research capabilities. They must satisfy the Department that they are able to carry out independent research. Since the Department cannot admit all candidates who apply for admission even with high standing, the Departmental Graduate Studies Committee pays close attention to samples of applicants' written proposals, transcripts and past records as a whole, and to letters of reference written on their behalf by former lecturers.

Candidates for admission to the programme shall normally be persons who have

- i. Obtained an M.Sc. degree in Geology or any relevant discipline of the University of Port Harcourt or any approved University and have a CGPA of not less than 4.0 on a 5-point scale or equivalently computed for scales other than 5.
- ii. Scored a minimum of 70% in a Ph.D. admission interview organized by the Departmental Graduate Studies Committee.
- iii. Students deficient in any area in the M.Sc. programme will be required to remedy the deficiency from M.Sc. Courses.

Students in the Ph.D. programme will not be accepted as candidates for the Ph.D. degree until they have presented and successfully defended to the department a proposal for research and during that presentation have demonstrated a comprehensive knowledge of the particular major field of study and thereafter, presented two seminars and satisfied the department in the course work aspect by presenting two seminars and passing the course work examinations.

Options in the Programme / Specialization Fields of Specialization

Students are expected to specialize in any one of the following fields of specialization.

- Biostratigraphy,
- Engineering Geology,
- Environmental Geology
- Exploration Geophysics
- Hydrogeology,
- Petroleum Geology
- Sedimentology and Reservoir Geology
- Exploration Geology (Mineral Exploration Option)
- Petrology and Applied Geochemistry
- Structural Geology

Mode of Study / Duration of Study

Full Time:

The Ph.D. programme candidate will be required to spend a minimum of 24 calendar months (2 years) and a maximum of 80 calendar months (5 years).

Part Time:

Candidates requiring a part time programme will be required to spend a minimum of 38 calendar months (3 years) and a maximum of 84 calendar months (7 years.)

Requirements governing course work and examination

The course work designed for the Ph.D. programme in the Department of Geology is intended to provide a foundation for advanced learning in the chosen field of research.

- 1. The Ph.D. degree programme in Geology shall follow the general regulations of the College of Graduate Studies, University of Port Harcourt as spelt out in the prospectus
- 2. The programme consists of course work, seminars and research for the doctoral dissertation.
- 3. The courses shall be evaluated in terms of course units, with a minimum of three (3) and maximum of six (8). The dissertation shall have a credit unit of 12.
- 4. All candidates shall be required to register for not less than fifty (50) credit unit courses in the programme. Out of this, a maximum of thirty (30) credit units may be earned from relevant courses at the M.Sc. programme. However, students with deficiency will be required to audit some courses at M.Sc. level.

Course Content

Compulsory Courses:

With effect from 2011, all PhD Programmes shall be completed by course work and research. Thus, beginning from 2011/2012 academic session, all new PhD candidates are expected to take and pass each of the following courses in their area of specialization with a minimum of C (50%) grade of the University of Port Harcourt.

Ν	Specialization	Course Co	de			
	Course	Course	General	General	Qualifying	Doctoral
		Work	Seminar	Seminar II	Examination	Dissertation
			Ι			
	Credit Units				Based on	
		3	3	3	course work	12
1	Biostratigraphy,	GLY 901	GLY 902	GLY 903		GLY 904
2	Engineering Geology,	GLY 901	GLY 902	GLY 903		GLY 904
3	Environmental Geology	GLY 901	GLY 902	GLY 903		GLY 904
4	Exploration Geophysics	GLY 901	GLY 902	GLY 903		GLY 904
5	Hydrogeology,	GLY 901	GLY 902	GLY 903		GLY 904
8	Petroleum Geology	GLY 901	GLY 902	GLY 903		GLY 904
7	Sedimentology and	GLY 901	GLY 902	GLY 903		GLY 904
	Reservoir Geology					
8	Exploration Geology	GLY 901	GLY 902	GLY 903		GLY 904
	(Mineral Exploration					
	Option)					
9	Petrology and Applied	GLY 901	GLY 902	GLY 903		GLY 904
	Geochemistry					
10	Structural Geology	GLY 901	GLY 902	GLY 903		GLY 904

In addition, according to Benchmark minimum academic standards for postgraduate Programmes in sciences in Nigerian Universities, all postgraduate students (irrespective of the Programmes) must take management and Entrepreneurship as well as ICT and Research Method as compulsory courses.

An outline of the courses in the various areas of specialization is given in part Appendix D.

Course Assessment

The courses will be assessed on the basis of written examinations and continuous assessment. Candidates will be required to obtain a minimum pass grade of C (50%) in the course work

Qualifying Examination

There will be a qualifying examination at the end of the second semester of the first year of the programme. The qualifying examination must be passed with a minimum grade of C (50%) before proceeding for the dissertation writing stage.

Seminars

General Seminar

These two seminars, each consisting of three credit units shall be held in the first and second semester of the first year to cover major topics excluded from other available courses. Students shall be required to present for the discussion short colloquia based on their reading of the assigned topics. Participation in the discussions as well as actual presentation of papers will be an integral part of the course.

Dissertation

Candidates shall be required to carry out their research under supervisor(s) appointed/assigned by the Departmental Graduate Studies Committee. During the first semester of the second year, the candidate in consultation with the supervisor will choose a Ph.D. dissertation topic to be approved by the Departmental Graduate Studies Committee.

Seminar based on research

This shall consist of three non-credit unit seminar presentations. The first two shall be presented in the department. The third seminar shall be presented before the Board of School of Graduate Studies examiners at the conclusion of the Ph.D. dissertation in accordance with the graduate studies regulations of the University of Port Harcourt.

Examinations of Dissertation

- **a.** For the examination of a candidate's doctoral dissertation, the Board of the School of Graduate Studies on the recommendation of the appropriate committee shall constitute a Board of Examiners with the Dean of Faculty as Chairman of Panel, an external examiner, representative of Dean of the School of Graduate Studies, the supervisor(s), the Head of Department and the Chairman of the Departmental Graduate studies committee.
- **b.** The examination shall be oral with questions asked on the candidate's Research work within the context of the candidate's research area. The Examiners shall submit joint report on the candidate's performance.
- c. All members of the Boards of examiners shall be signatories to each dissertation e.g.
- i. Supervisor(s)
- ii. Head of Department
- iii. Chairman of Examination Board/Panel
- iv. External Examiner

Graduation Requirements

The Ph.D. degree is awarded after candidates have satisfied the Board of Examiners that their dissertation based on research is a substantial original contribution to knowledge and have also demonstrated a higher degree of competence in areas of knowledge related to their specialization. The first requirement is satisfied when candidates have presented and defended a dissertation embodying the results of their own original research on an approved topic. The second requirement is satisfied when candidates have demonstrated a broad knowledge of their field to the satisfaction of the Faculty, normally by completion of an assigned programme of courses and passing of a qualifying examination, as determined by the Department of Geology.

GLY 901.1 COURSE DESCRIPTION

PETROLEUM GEOLOGY OPTION

GLY 901.1 Advanced Fossil Fuel Geology

Reservoir depositional models; Diagenetic developments; Reservoir Geological models; Petroleum Source rock evaluation Paleotemperatures; Paleopressures and Geothermal analyses; Trap analysis; Reserve estimation methods; Coal and Uranium geology; Exploitation Trends analyses; Sequence and Seismic stratigraphy; Geostatistical analyses of geologic data; Geologic Resources. Project management; Petroleum exploration and risk analyses techniques; Petrophysics.

EXPLORATION GEOPHYSICS

GLY 901.1 Applied Subsurface Geology

Advance seismology – reflection and refraction of elastic waves, amplitudes of surface motion due to seismic waves in a spherically stratified earth model, seismology and earth's interior. 3D, seismic exploration and interpretation, Seismic tomography and seismic stratigraphy. Gravity and magnetism, instrumentation and measuring techniques, data reduction and interpretation, Stoke's theorem. Laplacian equation, boundary value problems, continuation of potential fields. Electrical and electromagnetic, conduction process, current flow in layered media, application of various electrode configurations, polarization, primitivity and dielectric losses, induced polarizations, electromagnetic induction theory, transmitter-receiver configurations in EM prospecting magnetotellurics. Computation of apparent resistivity model curves from other electrode configurations. Hankel transformation, Maxwell's equation for electromagnetic field and the physical interpretations.

Petrophysical analysis, plate tectonics and materials of the earth, rheology of the earth and Basin analysis.

BIOSTRATIGRAPHY Option

GLY 901.1 Biofacies Analyses

Cretaceous – Tertiary quantitative palynology and Micropaleontology; Palynostratigraphic and Biostratigraphic zonation; Biostratigraphy and West African Geologic boundaries; Palynofacies events and geochronology; Palynocycles and sequences stratigraphy; Paleovegation and Paleossalinity analyses; Biogenic/ichnnofacies/Biolithic deposits.

ENVIRONMENTAL GEOLOGY OPTION

GLY 901.1 Advanced Environmental Geology

Migration of contaminants in porous media; environmental Impact Assessment and sustainable environmental management, Organic and inorganic contaminants; Strategies for monitoring contamination of soils and ground water. Site characterization for subsurface remediation.

HYDROGEOLOGY OPTION

GLY 901.1 Applied Hydrogeology

Groundwater resources evaluation and development. Unsaturated and multiphase Flow; well-hydraulics; fractured aquifers; finite differential method; linear saturated steady-state flow in porous media; confined aquifers; salt water encroachment; groundwater contamination; Hydrogeochemistry, pump and aquifer tests and groundwater survey techniques.

SEMINARS

GLY 902.1 General Seminar 1

GLY 903.2 General Seminar II

Biostratigraphy Option

Advances in Biostratigraphic Analysis

This involves interdisciplinary research on the history of the earth and its biota and their interaction through time.

Research programme in paleontology encompass the systematics of specific animals and plant groups, the evolutionary processes underlying phylogenetic patterns, paleoecology, the response of ecosystems to abiotic and biotic change, and the relationship of ecological patterns to evolving lineages. Studies of environmental history emphasize the responses of shallow water depositional systems to changing climates and rates of subsidence. Reef dynamics and the history of ocean basins. The course is subdivided into 3 sections;

- **Principles:** Systematics, paleontological techniques, processing and microscopy, protozoans (animal and plants; megafossils).
- **Application:** Introduction top biostratigraphy and time scales; Mesozoic-Tertiary palynomorphs, Mesozoic-Tertiary planktic and benthic foraminifera etc. potential for zonation, intercontinental correlation, paleoecology, paleo-climatology, paleoceanography and palaeoprovincialism; aquatic and non-aquatic Quaternary; climate and vegetation reconstruction.
- **New directions**. Other applications and floral history: Archaeological palynology; underwater pollen analysis; prehistoric diet reconstruction; melissopalynology; Entomopalynology; medical palynology; forensic studies in palynology; computer analysis; analytical biostratigraphy and correlation; palynofacies; fecal pallets; palynology in ores and petroleum exploration and exploitation; vegetational history, economic application of palynology and foraminiferal studies.

Engineering Geology and Hydrogeology options

ADVANCED TOPICS IN ENGINEERING GEOLOGY AND HYDROGEOLOGY

- 1. Advanced Geomechanics (rocks & soil mechanics) and mechanical property testing and analysis.
- 2. Advanced geotechnical site investigation for major civil engineering structures and dams.
- 3. In-situ field testing and analysis and use of latest computerized techniques.
- 4. Advanced slope stability analysis of gully erosion problems.
- 5. Analysis of aquifer pumping test results and sustainable water resources exploitation.
- 6. Water resources modeling and evaluation.

ADVANCED TOPICS IN ENVIRONMENTAL GEOLOGY

- 1. Reconciling various approaches to concept of sustainable development.
- 2. Advanced framework for environmental sustainability.
- 3. Advanced tools for environmental management systems including EIA, SIA, risk assessment, EMP, IMM and environmental audit.
- 4. Holistic approach to mitigation of gully erosion and flood geo-hazards.

5. Contaminant fate, movement and mitigation and effects of geology.

Site investigation for remediation of contaminated sites

	ACADEMIC STAFF						
S/	Name	Qualification	Designation	Specialization			
<u>N</u> 2	Prof. E. G.	$\mathbf{D} \mathbf{C} = (\mathbf{H} + \mathbf{I} + \mathbf{v}) \mathbf{M} \mathbf{C} = (\mathbf{I} \mathbf{C} + \mathbf{v})$	Desferre	Environment Carlan 8			
2		B.Sc. (Ibadan) M.Sc. (Ife),	Professor	Engineering Geology &			
4	Akpokodje Prof. J. O Etu-Efeotor	PhD (NSW) B.Sc. (Ife), MA (Harvard),	Professor	Environmental Geology Sedimentology and			
4	FIOL J. O Elu-Eleoloi	PhD (Wales)	FIDIESSOI	Petroleum Geology			
5	Prof. N. F. Ukaigwe	B.Sc. (Ibadan), Ph.D.	Professor	Geophysics			
5	1 IOI. IV. I'. OKalgwe	(Adelaide)	110103501	Geophysics			
6	Prof. M. I. Odigi	B.Sc., M.Sc. (UI), Ph.D.	Professor	Economic Geology &			
0	1 Iol. W. I. Ouigi	(UPH)	110103501	Petroleum Geology &			
7	Prof. V. U. Ukaegbu	B.Sc.(UPH), M.Sc. (Jos),	Professor	Exploration Geology,			
,	rion v. e. ekuegeu	Ph.D. (UPH)	110105501	Petrology & Geochemistry			
8	Prof. A. C. Ibe	B.Sc. Hons (Nig), Ph.D.	Professor	Marine Organic			
		(Lond) DIC (Imp.Coll. P.		Geochemistry and			
		Eng (USA),		Sedimentology			
11	Prof. G. J. Udom	B.Sc., M.Sc., Ph.D.	Professor	Hydrogeology			
		(Calabar)					
12	Dr. F. T. Beka	B.Sc. (Ibadan), Ph.D.	Senior Lecturer	Economic Geology &			
		(Washington)		Petroleum Geology			
13	Dr. A. C. Tse	B.Sc. (ATBU), M.Sc., PhD	Senior Lecturer	Engineering Geology &			
		(UPH)		Environmental Geology			
14	Dr. S. A Ugwu	B.Sc., M.Sc., Ph.D. (UNN)	Senior Lecturer	Geophysics			
15	Dr. J. I. Nwosu	B.Sc., Ph.D. (Russia)	Senior Lecturer	Mining Engineering			
16	Dr. N. E. Ekeocha	B.Sc., M.Sc. PhD. (UPH)	Lecturer I	Engineering Geology			
17	Dr. N. Egesi	B.Sc., M.Sc. (Jos)	Lecturer I	Structural Petrology			
18	Dr. H. O.	B.Sc. (UPH), M.Phil.	Lecturer I	Hydrogeology			
	Nwankwoala	(RSUST) Ph.D. (UPH)					
19	Dr. S. Abrakasa	B.Sc. (Calabar), M.Sc., PhD	Lecturer I	Organic Geochemistry			
		(Newcastle)					
21	Dr. K. O. Okengwu	B.Sc. (Calabar), M.Sc. PhD	Lecturer I	Petroleum Geology			
		(UPH)					
22	Dr. (Mrs.) J. N.	B.Sc. (Awka), M. Phil	Lecturer I	Petrology & Geochemistry			
22	Onwualu	(RSUST) PhD (UPH)	T / T				
23	Dr. Acra Jones	B.Sc., M.Sc., PhD UPH)	Lecturer I	Sedimentology			
24	Dr. F. D. Giadom	M.Sc. (UPH), M.Phil.	Lecturer II	Environmental Geology			
25	D. D. U. Li.	(RSUST), PhD (UPH)	I soft and II				
25	Dr. R. U. Ideozu	B.Sc., M.Sc. PhD (UPH)	Lecturer II	Petroleum Geology &			
				Sedimentology / Reservior			
26	Dr. C. U. Ugwueze	B.Sc. (ESUT), M.Sc. PhD	Lecturer II	Geology Petroleum Geology			
20	DI. C. U. Ugwucze	(UPH)		I cubicum Geology			
27	Mr. D. C. Okujagu	B.Sc., M.Sc. (UPH)	Lecturer II	Remote Sensing and GIS			
27	Miss F. I. Nwokocha	B.Sc., MSc (UPH)	Lecturer II	Reservoir Geology			
20	191155 I . I. INWOROUIIA			Reservoir Geology			
	1	1					

ACADEMIC STAFF

Non-Academic staff

S/N	Name	Qualification	Rank/Designation
1	Nwogu, Christopher O (Mr.)	HND, NIST	Assistant Chief Technologist
2	Kamalo Okanje Barnabas (Mr.)	HND, NIST	Principal Technologist

3	Wordu, Kingsley (Mr.)	HND, NIST	Senior Technologist
4	Igbani, Victoria S. (Miss)	HND, NIST	Senior Technologist
5	Ndinuojuo Ben-Collins Emeka	HND, NIST	Technologist II
	(Mr.)		-
6	Ukonu Onyinyechi Faith (Mrs)	HND, NIST	Technologist II
7	Agwu Margaret (Miss)	HND, NIST	Technologist II
8	Digbani, Festus Tubo (Mr.)	B.Sc.	Senior Assistant Technologist
9	Chukwu, Ebenezer (Mr.)	ND, NIST	Senior Assistant Technologist
10	Itode, A. Moris (Mr.)	HND, NIST	Senior Assistant Technologist
11	Bune Chinyere Phoebe (Miss)	B. Sc	Laboratory Assistant
12	Amadi Philomina Eze (Mrs)	GCE	Laboratory Assistant
13	Okorogba Gloria	GCE	Laboratory Assistant
14	Ogbonna Vincent Anaboro (Mr.)	B. Sc	Head Lab Attendant
15	Nwobueze Azubuike (Mr.)	GCE	Laboratory Assistant
16	Ihunda Osoruchi Faith (Mrs)	GCE	Head Lab Attendant
17	James Peace Samuel (Mrs)	GCE	Head Lab Attendant
18	Mpi, Ndidi Felicia	B. Sc	Assistant Registrar
18	Obi Patience (Mrs)	B. Sc	Personnel Secretary II
20	Ordu Gladys (Mrs.)	GCE	Clerical Officer 1
21	Ononiwu, Richard N. (Mr.)	GCE	Computer Operator
22	Amadi, Stella N (Mrs)	FSLC	Caretaker
23	Worlu Florence (Mrs)	FSLC	Cleaner / Messenger
24	Wachukwu Precious (Miss)	SSCE	Cleaner / Messenger

The University has approved and published the University of Port Harcourt Research Ethics Policy and set up Research Ethics Committee to monitor compliance. Consequently, it is mandatory international best practice that every research proposal must undergo ethical clearance before presentation to the Departmental Board. At every stage in the research process, this clearance should be demanded. Therefore, it is the responsibility of the supervisors to ensure full compliance.

The Plague of Plagiarism

More than ever before, in today's knowledge dissemination networks of the global intellectual system, plagiarism as the highest academic transgression does incalculable damage to the image of an institution. During the 29th Meeting of Vice-Chancellors at the Conference of the Association of Vice-Chancellors of Nigerian Universities (AVCNU) at the Afe Babalola University Ado Ekiti (ABUAD) on June 2, 2014, the Association received reports on the plague of plagiarism ravaging the Nigerian University System. At the Meeting, Vice-Chancellors committed themselves to wage a war against plagiarism through what is now known as ABUAD Declaration, 2014.

To protect the academic and intellectual integrity of academics and our universities, the well-established statutes on academic fraud must be complied with and enforced. Universities were directed to withdraw Degrees awarded to beneficiaries of proven cases of plagiarism. Also, henceforth no external examination is to be conducted without a certificate of clearance from anti-plagiarism test using approved anti-plagiarism software packages.

Consequently, please find attached as sample Anti-Plagiarism Clearance Certificate.

UNIVERSITY OF PORT HARCOURT

RESEARCH ETHICS CLEARANCE CERTIFICATE

The University of Port Harcourt Research Ethics Committee has reviewed the research proposal of the applicant and hereby issued a certificate of ethical compliance to research ethics in accordance with the University Research Ethics Policy and global best practice.

Research Proposal	
Name of Student:	
Registration Number:	
Topic:	
Supervisor(s):	1)
	2)
Department:	
Faculty/College:	

Certification	Name		Signature		Date	
Reviewed by:						
Cross-checked by:						-
Approved by*:						_
QA/QC Initiative, Version Representative	1.0, June 8, 2014	*Chairman	Research	Ethics	Committee	0

Declaration of Full Compliance on Thesis/Dissertation

We hereby declare full compliance with University of Port Harcourt Research Ethics

Applicant	Name	Signature	Date
Student:			
Supervisor(s):	1)		
	2)		

University of Port Harcourt Research Ethics Committee Office of the Deputy Vice-Chancellor Research & Development

University of Port Harcourt, Nigeria, 2014

UNIVERSITY OF PORT HARCOURT

ANTI-PLAGIARISM CLEARANCE CERTIFICATE

The University of Port Harcourt Centre for Research Management has received the Thesis/Dissertation of the Student and hereby issues a certificate of integrity compliance to research culture in accordance with the University Research Policy and global best practice.

Name of Student:	
Registration Number:	
Topic:	
Supervisor(s):	1)
	2)
Department:	
Faculty/College:	

*Anti-Plagiarism Software Check

Result:	
Cleared:	
Not-Cleared	

Certification	Name	Signature	Date
Reviewed by*:			
Cross-checked by**:			
Approved by****:			

QA/QC Initiative, Version 1.0, June 8, 2014

*ICT Officer; **Subject Librarian; ***Chairman Centre for Research Management or Representative

University of Port Harcourt Research Ethics Committee

Office of the Deputy Vice-Chancellor Research & Development University of Port Harcourt, Nigeria, 2014