

Students' Handbook

BSc Chemistry

Baze University, Abuja

British Style and British Quality

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Foreword

The Department of Chemistry of Baze University, Abuja was established in 2013 under the Faculty of Computing & Applied Sciences after an approval by the National Universities Commission for the takeoff of the program.

Chemistry is a science that deals with the properties, composition, and structure of substances (defined as elements and compounds), the transformations they undergo, and the energy that is released or absorbed during these processes. Chemistry seek to find explanation for the complex behavior of materials, why they appear as they do, what gives them their enduring properties, and how interactions among different substances can bring about the formation of new substances and the destruction of old ones. Chemistry is also concerned with the optimal utilization of natural substances and the creation of artificial ones in order to meet the needs in society. Chemistry is the index of industrial development. Chemistry has played tremendous role in development processes in the petroleum and petrochemical industries of Nigeria.

In recent years, there has been an intensified effort to reduce dependence on fossiliferous resources, such as petroleum, natural gas or coal for energy provision in the interest of environmental sustainability. Chemistry is directly involved in the challenge for sourcing of alternative raw materials using environmentally friendly and renewable resource, in particular, plants. Moreover, the exploitation of our nation's largely unexplored solid mineral resources rests squarely on the application of chemical knowledge. Mining and processing of these resources can create employment and development of skills for chemists. Therefore Chemistry will continue to play a significant role in the near and distant future, and Chemistry graduates will increasingly become more relevant.

The Department of Chemistry at Baze University seeks to create and maintain an excellent academic environment that would turn out highly and globally competitive graduates of Chemistry that will not only be employable but also prepared for pursuits of higher degrees anywhere according to their choice. In aiming at this, adhering very strictly to very high quality research and teaching, and publications in highly rated international journals shall be guiding posts. In order to ensure that the Chemistry Department remains one of the best in Nigeria and Africa, the Management of the University has provided the department with the state-of-the-art facilities, tools and texts and rich e-learning resources that would help both staff and students to perform at their best. We have also put in place a mentorship scheme in the department so that every student is properly guided and tutored to ensure that (s)he performs optimally. The members of staff of the Chemistry department are very friendly and always ready and willing to assist you with your academic work.

This handbook describes the honours undergraduate programme in Chemistry at Baze University. The programme is guided by BMAS Science 2015 for the accreditation of Chemistry programmes in Nigeria by the National Universities Commission (NUC) and by the requirements of the Royal Society of Chemistry for the accreditation of Chemistry programme in British Universities. Students are advised to study this handbook in order to acquaint themselves with what is expected of them and the provisions that have been put in place to assist them perform well. You are welcome to the Chemistry Department, and best wishes for a fruitful and successful academic career.

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1.0 GENERAL POLICIES, REGULATIONS AND PROCEDURES FOR ADMISSIONS

1.1 Principles of Admission

- (i) Every programme is guided by specific admissions regulations (programme-specific regulations) drawn up in accordance with these regulations and with regard to relevant policies of NUC and University Senate, which are agreed through the validation process. Such programme specific-regulations are set out below.
- (ii) The university will admit students to its programmes on the basis of the following principles:
 - a) Reasonable expectation that the applicant will fulfil the objectives of the course and achieve the standard required for the award.
 - b) The University's requirements for admission into the programme leading to a particular award.
 - c) Equality of opportunity for all applicants.
- (iii) The University will abide by the requirements of NUC and JAMB guidelines with respect to admissions into Nigerian Universities. Particular attention is drawn to the University's Admission Policy and any relevant pronouncements that may be made from time to time.
- (iv) The purpose of this framework is to define and describe the policies, regulations and procedures that guide the admission, progression and the qualifications awarded by Baze University.

1.2 Types of Admission

Candidates are admitted into the degree programme of Baze University in any of the following three ways:

- i. The University Tertiary Matriculation Examination (UTME)
- ii. Direct Entry
- iii. Inter-University Transfer

1.3 Admission Requirements by Type of Admission

A. Unified Tertiary Matriculation Examination (UTME)

For a candidate to gain admission into Baze University for a degree programme, as with any Nigerian university, he/she must have passed a minimum of five credits (O' Level) in relevant subjects including English and Mathematics in Senior Secondary Certificate Examination (SSCE) or its equivalent at not more than two sittings.

B. Direct Entry Admission (DE)

Candidates with two A level passes (graded A-E) at the Advanced Level in one or more relevant subjects of the intended programme may undertake the three-year degree programme into 200-level. This is in addition to the minimum of five credits O' Level passes in relevant subjects including English Language and Mathematics.

C. Inter-University Transfer

A student from another university or equivalent overseas institution may wish to transfer to Baze University under Inter University Transfer arrangement for a variety of reasons. Essentially, these may border on personal challenges or other defensible causes such as security, circumstances of parents or, financial burden in the case of overseas students. Regardless of the circumstances, the following are the guidelines for prospective transfer students on how to apply for inter-school transfer from their university to Baze University.

There shall be established Senate Committee on Admissions with responsibility for Inter-University Transfers. The committee shall be composed of the following members:

- Director, Academic Planning as Chairman,
- Admissions Officer
- Representative of Deans of Faculties of relevant disciplines
- Heads of Department of relevant disciplines

D. Guidelines for Inter University Transfer

- a) Applications for admission by transfer shall be addressed to the Chairman, Senate Committee on Admission and submitted to the Admissions Office for presentation to Senate Committee on Admission for consideration.
- b) Application forms for transfer into Baze University shall be obtained from Admission Department and Students affairs without payment of fees.
- c) Transfer candidates shall possess the minimum Baze University and Departmental entry requirements prior to entry into the university from where they are seeking transfer.
- d) The candidate must not be out of school for more than one session.
- e) Transfer students shall make a minimum cumulative grade point average of 2.00 on a 4.00-point scale to qualify for consideration.
- f) Transfer students must not be admitted beyond 200 level of a 4 year programme and 300 level for a 5 year programme.
- g) Transfer students can only apply to programmes related (or same) as the one they are studying in their former university or start afresh in a new programme.
- h) Transfer students must have good moral record in their former university and must not have any record of involvement in cultism or some other campus vices.
- i) Application should be accompanied by certified student's transcript, and will subject to verification by the Senate Committee on Admission from the university from where transfer is being sought.
- j) All applications for Inter-University Transfer into any academic session should be received on or before the commencement of a new semester.
- k) All recommendations for admission by transfer from Faculty shall be submitted to the Admissions Office for collation and presentation to Senate Committee for consideration.
- l) If any irregularity is discovered in the papers presented by the student(s), such student(s) shall be withdrawn from the university.

2.0 Modular Framework

- i. Baze University operates the Course Unit system in accordance with NUC Regulations. The regulation starts with the premise that qualifications should be awarded on the basis of outcomes and attainment during specific years of study.
- ii. The framework covers all undergraduate taught programmes delivered in Baze University.
- iii. Every full time student should be required to register for a minimum of 15 credit units per semester and a maximum of 24 credit units except for students on field experience/industrial attachment or spill over students.
- iv. The module requirement for each programme is as specified by the department and/or faculty handbook.

3.0 Students' Change of Programme

3.1 Change of degree programme

- i. Change of degree programme applies to undergraduate students who are currently attending Baze University and wish to change to a different programme in the university. A student wishing to move to a new programme of study should discuss the possibility with his/her Academic Advisor, Head of Department, and Dean of the Faculty, in that order.
- ii. With an agreement in principle, the student will then formally apply to the Department/Faculty responsible for the programme to which he or she seeks move to. Whether or not the student is permitted to change into another programme depends on a number of factors, including:
 - ❖ A satisfactory attendance record in the old programme.
 - ❖ Capacity in the receiving programme.
 - ❖ Agreement to the change from both the current programme of study to the new programme.
- iii. If both departments agree to the change, the student can then request a change of programme form from his/her Faculty. Both the releasing and accepting Faculty must complete and sign the change of programme form before the student can enrol into the new programme.

3.2 Academic requirements for change of course

When a student transfers to a new programme, it is expected that he/she will complete its full academic requirements. It is up to the student to take note of any advice given to him/her during discussions about the change of programme transfer. The student's new Faculty will give a written statement of any academic catch up. However, if there are any specific gaps in learning outcomes, the student may be asked to take a small amount of extra modules or forego an elective to complete a specified module. The student is not permitted to repeat any module he/she has previously taken and passed.

3.3 Credit transfer

It may be possible, with the permission of the Dean of the Faculty concerned, to allow some of the credits the student has previously gained to be transferred. The receiving Faculty will make a decision as to whether the modules the student has already taken meet the learning outcomes of his/her new programme.

3.4 Terms and conditions of transfer into new programme

Furthermore, either Faculty may require the student to pass some or all of the examinations or assessments as a condition of the transfer. During this period, the student will continue to be subject to the normal conditions of attendance in the University.

3.5 General guidelines for programme transfer

- i.** Withdrawn candidates on poor academic standing from a faculty or programme are allowed to benefit from such transfer.
- ii.** Transfer from Science to management or social science programme and will only be allowed if the O level and JAMB requirements are fulfilled.
- iii.** The minimum CGPA for inter-university transfer is 1.00
- iv.** Candidates must satisfy the University minimum entry requirements for admission.
- v.** Intra-Faculty transfers are allowed.

4.0 Student Advisory Services

Each student is assigned an academic advisor by the department who will:

- i.** Help him/ her with the academic issues.
- ii.** Carry out the registration procedure.
- iii.** Report to the Head of Department about the academic situation of the student.

5.0 STUDENTS' SEMESTER REGISTRATION

Each student must register and pay the appropriate tuition at the beginning of each semester according to the registration process in operation during that semester.

5.1 Registration Procedure

- i The registration process includes getting copies of relevant document signed and submitted to all relevant places as may be advertised by the University, Faculties and Departments.
- ii Returning students must complete the registration process within the specified time limit for the semester.
- iii A returning student who fails to complete the registration process within the specified period approved for registration shall be deemed to be registering late and shall pay a late registration fee as may be prescribed by the University from time to time.
- iv A returning student who fails to register within the first quarter of the commencement of the semester shall not be allowed to register. Such a student shall be deemed to have withdrawn unless s(he) provides an acceptable reason to the Senate, in which case s(h)e can be considered for suspension of studies.
- v A fresh student must complete the registration process within the specified time limit for the semester. Failure to complete the process at this time shall attract a late registration fee or forfeiture of admission.
- vi The registry and Faculties shall ensure that the registration process is completed on time, that the process is clearly explained and publicized to the students, and that staff members involved in the exercise maintain effective office hours so that the students could see them without hindrance.

5.2 Minimum and Maximum Credit Load

The minimum credit load is 15 credit units per semester and a maximum of 24, except in exceptional circumstances, such as:

- i. Students on industrial training, internship, etc., where such an exercise lasts for a semester and its credit load is less than 15.
- ii. Spill-over students requiring less than 15 credits in a semester
- iii. Students with many carry over courses in one semester.

5.3 Registering for Modules

- i. Modules are to be registered for by students sequentially. Thus a student must register for level 2 modules before registering for level 3 modules. Moreover, when registering, a student shall first enter lower level modules (failed, or not taken earlier) before entering higher level ones.
- ii. If a student has failed modules in a previous semester and registration of the failed modules will lead to a combined credit load to exceed the maximum of 24, then the student shall not be allowed to register for the higher level modules.
- iii. If a student fails a required module (s)he must register it as a carry-over in the subsequent semester(s) until the module is cleared.
- iv. A student shall not repeat any module that (s)he has passed, irrespective of the passing grade.
- v. If a student has failed a module either core, elective or optional and the module has been discontinued, then the student must register for an appropriate replacement module so long as he or she has not satisfied the minimum credit required for graduation. A student must consult a programme coordinator in order to decide on the appropriate substitute.

5.4 The Add/Drop Procedure

- i.** Registered students may make minor changes in the modules registered for by adding or dropping some modules at the beginning of the semester.
- ii.** The procedure and conditions for the add/drop are as follows:
- iii.** Interested students shall collect the add drop form from the registry.
- iv.** The student must discuss the proposed changes with the programme coordinator.
- v.** The changes need endorsement of all concerned departments and faculties.
- vi.** The changes in registration must be in line with the following: the registration conditions set in 1.9 to 1.13 above; the requirements for minimum and maximum credit loads in a semester and the regulations of the Faculties, departments and students programme of study.
- vii.** The process must be completed within the semester registration period set by the University.
- viii.** A student can neither add nor drop a module after the close of registration period.

5.5 Earning Credit and Absence In Examinations

- i.** A student cannot earn credit in any module (S) he has not registered for through the normal registration process, or the add/drop process. Thus, if a student sits for an examination for any module for which (s) he is not registered, the results of such an examination shall be cancelled.
- ii.** The results of all the modules registered by a student (except those dropped through the add/drop process) shall be reported. A student who registers for a module but fails to sit for its examination without valid reasons shall be deemed to have failed the module. Thus, a grade of 'F' shall be reported for such a student in the module. However, it shall be reported that the student was absent in the examination, so (s) he can be aware of the reason for the failure.

5.6 Deferral

This means that a student is allowed to interrupt their programme of study for a given period of time, normally a semester. Deferral is usually on medical, psychological, or personal/financial grounds, in short, anything which may be seen to have a negative effect on student performance and progress.

5.6.1 Deferral procedure

- i.** Any student who is contemplating suspending their programme must first discuss this though with their programme coordinator. And is only advised for good reason.
- ii.** Students may not defer a programme of study after the semester registration period unless on emergency grounds.
- iii.** The student must put in the request to the Registrar by filling a programme deferment form and attaching to this form any relevant document to support students' request.
- iv.** In a case where the student has registered for the semester and an emergency has not been proven, a student may lose partial or full tuition paid for the semester.
- v.** The decision to grant a deferment is at the discretion of the Registrar and will be communicated to the student in writing.
- vi.** Conditions may be imposed on the student before re-entry is permitted.
- vii.** There may also need to be changes to the student's programme of studies following return from suspension and these will also have to be included in any agreement to suspension.
- viii.** When a student is ready to apply for re-entry, they must write to the Registrar in accordance with the letter, providing any required evidence of fitness to return.

6.0 STUDENTS' CONTINUOUS ASSESSMENT (CA) REGULATIONS

6.1 Definition of Coursework

The term “coursework” or “assessed coursework” relates to: essays, assignments, in-class tests, laboratory tests, projects, dissertations, practical work, presentations, viva voce examinations, placement or field trip reports, designs, theses, artefacts, digital photographic media, and computer based analysis. This is not an exhaustive list.

6.2 In-class Tests

- i.** In-class tests are a form of assessment that normally takes place in class time and are used to assess one part of a course syllabus. The “In-class tests” should not normally be scheduled to take place during the University examination periods as detailed in the University Calendar.
- ii.** In-class tests should be scheduled during the teaching slot for the course, and should not exceed the normal duration of the teaching slot. It should normally be one hour long and must not be longer than two hours.
- iii.** Where an in-class test takes the form of an unseen paper, the course Lecturer(s) should inform the Examination Office of the date and time of in-class tests so that appropriate arrangement could be made for the invigilation of the test.

6.3 Submission of Coursework

- i.** It is the student’s responsibility to ensure that coursework is submitted by the published deadline and in accordance with the published system. Students must check with the Course Lecturer in advance of the deadline if they are not sure of the correct procedure for the submission of coursework.
- ii.** Students must keep a copy of all written or electronic coursework submitted for assessment and should form the habit of taking regular backup of their course work to avoid disappointments that may arise due to computer system corruption.
- iii.** In situations where the Course lecturer requires the students to submit their work through text matching software, such as Turnitin, the work of any student that fails to comply may not be marked.
- iv.** Where a student does not meet the deadline for the submission of course work, a penalty for late submission may be imposed.

6.4 Late Submission of Coursework

- i.** If students submit coursework late but within 24 hours of the published deadline, the work will be marked and will have ten percentage points of the overall available marks deducted, to a minimum of the pass mark (45% at undergraduate level, 50% at postgraduate level). For example, if a student who submits his or her work late scores a mark of 70%, the mark will be reduced to 60% as a penalty for late submission.
- ii.** If students submit coursework more than 24 hours after the specified deadline, a mark of zero will be awarded for the work in question.
- iii.** Penalties for late submission of coursework do not apply if a claim of mitigating circumstances has been accepted through the Mitigating Circumstances process

6.5 Network Failure

- i.** In the event of major disruption to the University Network System, which results in it not being accessible for significant periods on the submission deadline date, the submission deadline will be amended to the next working day on which the University Network System becomes available. Confirmation that major disruption has taken place will be provided by Information Technology (IT) Department to the Faculty Officer.
- ii.** For electronic submissions, failure of a network and/or broadband access other than the University Network System (e.g. at home or work) will not be accepted as a reason for non-submission.

6.6 Return of Coursework (Feedback)

- i.** Coursework will be returned to students within a reasonable time and with sufficient guidance in the form of written feedback and provisional marks to enable them to monitor their academic performance.

Note: All marks will remain provisional until formally agreed by the Faculty and departmental Examination Boards.

7.0 EXAMINATIONS: REGULATIONS FOR STUDENTS, STAFF AND INVIGILATORS

7.1 Definition of Examinations

- i.** An examination is defined as a formal, time-limited, written or practical assessment, which is scheduled during the University examination period, with invigilation provided, or approved by the Senate.
- ii.** Examinations may take a number of forms:

7.1.1 Closed

Students are not permitted to bring any notes or other supporting material into the examination except where it is permitted by the instructions on the paper to use specified types of calculators or drawing instruments.

7.1.2 Restricted

Students are allowed to use certain limited specified materials, such as references or texts, all of which will be specified in the instructions on the paper.

7.1.3 Open

- i.** Students are allowed to bring in any materials, including their own notes. Such examinations must be specified as open examinations at the head of the paper. Open examinations cannot take place in the same room as other examinations.
Note: The open examination is usually restricted to classroom test.
- ii.** Where courses include assessment(s) by examination, students will be advised by the Course Lecturer of the form of examination (i.e. closed, restricted or open).
- iii.** In the case of restricted examinations, where students are permitted to bring into the examination room their own texts (such as a case study) these will normally be provided in advance by the University. Students must be advised in advance of an examination, which texts are acceptable. All texts must be checked by the invigilator(s) prior to the start of the examination, to confirm they conform to the specification and do not contain unauthorized material, or annotations.

7.2 Timing and Location

- i.** Examinations will only be held during the designated periods published in the University Calendar.
- ii.** In very special cases, examinations may be held outside the Baze University premises.
- iii.** Where one course is studied by different student groups, any identical examination must be taken simultaneously.
- iv.** Examinations of different durations may not normally be scheduled in the same room.

7.3 Use of Calculators, Dictionaries, Reference Books and Equipment in Examinations

- i.** Students should be clearly advised by the Course Lecturer what equipment is, or is not allowed, to be taken into the examination room in advance of the examination. Where the use of calculators, specified reference books, or other equipment is permitted in the examination, this shall be supplied and clearly stated in the Examination Questions Submission form of the examination paper. The type of calculator, title of book(s), or type of other equipment shall be clearly defined. This will be supplied by the Examination and Records Registry.
- ii.** Where a student is granted individual examination arrangements (see Section 6.3: Individual examination and assessment arrangements) arising from a special need such as dyslexia, the use of a dictionary (English or approved language) or other equipment may be permitted, where appropriate. All dictionaries and equipment must be approved in advance, according to standard procedures for the approval of individual assessment arrangements. Dictionaries must not contain any technical data of potential use to the student.

7.4 Examination Timetable

7.4.1 Student's responsibilities

- i.** It is the responsibility of each individual student to ensure they have checked the provisional timetable for examinations in relation to all courses for which they are registered, and in the case of difficulty, to make representations through their heads of department to the Registry concerned by the deadline date published on the timetable. It may be necessary for students to sit more than one examination on any one day. Such considerations shall not normally be valid grounds for a review of the timetable.
- ii.** As much as possible, formal assessment/examinations (and in-class tests) will not be scheduled on the dates noted as "Religious Observance" within the Baze University Calendar. However, if they have to be, students who profess a faith may inform their Registry of the clash. This must be done within ten working days of the publication of the provisional timetable for examinations. All reasonable efforts will be made to move the formal assessment/examination to another time, but in cases where this is not possible, students will be offered a deferral to the next available opportunity. In the case of in-class tests students should approach their Course Lecturer directly so that other arrangements may be made.

7.5 Publication of the Final Examination Timetable

7.5.1 Student's responsibility

- i.** The final timetable may include changes from the provisional timetable. It is the responsibility of each individual student to ensure that (s)he checks the final examination timetable in relation to all courses for which (s)he has registered. Information about the examination timetable will not be disclosed by telephone.
- ii.** A student who does not obtain 75% lecture attendance in any given course or who has not completed enrolment, or is in debt to the University prior to the date for submission of the final piece of coursework, or the date of the first examination, whichever is the earlier, is not eligible to sit any examination(s).

7.6 Examination Organization

7.6.1 Student's responsibilities before the examination

- i.** Every student must bring his/her Baze University identity (ID) card to examinations and display it on their desk during the examination.
- ii.** Students may enter examination rooms only when permitted to do so by the invigilator and must follow the invigilator's instructions at all times.
- iii.** Students may at the discretion of the invigilator be admitted to the examination room up to 30 minutes after the start of the examination, provided no student has left the room, but not thereafter. No additional time will be given for any student arriving after the start of the examination.
- iv.** Students must leave all personal effects except those required for, or authorized in connection with an examination in the place indicated by the Invigilator. All mobile telephones, alarm watches, or similar devices must be switched off. No food or drink is permitted in the examination room other than small items of confectionery, or medicines on prescription and a small bottle of water.
- v.** If a student discovers (s)he has unauthorized materials, including stationery, notes, or equipment not permitted in the rubric of the examination paper (s)he must draw this to the attention of the invigilator immediately by raising his or her hand.
- vi.** Before the examination commences students should check that they have the correct examination question paper, stationery, materials, aids and equipment.
- vii.** Students must not commence writing, other than to complete identification details on the answer book, until the start of the examination is announced by the Invigilator.
- viii.** Breach of any of the regulations in this section by a student, including failure to follow the directions of an invigilator, may be an examination offence (see Section 6.5.6).

7.7 During the Examination

7.7.1 Student's responsibilities during the examination

- i.** When instructed, students must read the instructions on the question paper and answer booklet.
- ii.** Students must remain silent and in their seats for the duration of the examination. If a student wishes to attract the invigilator's attention they should do so by raising a hand.
- iii.** Students must remain in their seats throughout the examination and if given permission to leave the examination room temporarily, they must be accompanied by an invigilator (or nominee) at all times. Any student who leaves the examination room without the permission of an invigilator will be deemed to have withdrawn from the examination and will not be re-admitted to the room.
- iv.** No student may leave the examination during the first 30 minutes, or the last 30 minutes of the scheduled examination, other than on the instructions of an invigilator.
- v.** Students may only use the official stationery provided. Any rough work may be done on the answer booklet. A student found in possession of, or having completed work on, any other stationery, will be liable for investigation for a suspected examination offence (academic misconduct).
- vi.** Under no circumstances should a student remove an answer booklet, examination question paper, or rough work from an examination room.
- vii.** While in the examination room, students shall not read, or otherwise apprise themselves of the work of other students.
- viii.** During the examination students shall not communicate in any way with any person other than an invigilator. To attempt to do so constitutes academic misconduct.
- ix.** Students must not disturb, or distract other students in any way. A student who in the opinion of the invigilator causes an unreasonable disturbance, and continues to do so after warning, shall be required to leave the examination room and will not be re-admitted.
- x.** A student who wishes to leave the examination room early must first attract the attention of an invigilator and have their answer booklet collected. Such a student should take care not to disturb other students when leaving and must observe examination rules until out of the room.

- xi.** A student whose answer booklet has been collected will not be re-admitted to the examination room.
- xii.** Any student who leaves the examination room without the permission of an invigilator will be deemed to have withdrawn from the examination and will not be re-admitted.
- xiii.** When the end of the examination is announced by the invigilator, students must stop writing.
- xiv.** At the end of the examination students must remain seated and silent until all answer booklets have been collected, counted and until dismissed by the invigilator. Not to do so constitutes academic misconduct.

Note: Breach of any of these regulations constitutes an examination offence and will be reported under the University's breach of assessment regulations

7.8 Procedures in the Event of an Emergency Building Evacuation

- i.** For the purpose of these regulations, an examination shall be deemed to have started when students have begun to read the examination question papers.
- ii.** Where at the designated time of starting an examination, the building in which it was due to be held is closed as a result of an emergency building evacuation, the examination will normally start 15 minutes after the building has been re-opened.

7.9 An Evacuation Occurring Before the Examination Has Started

7.9.1 Student's responsibility

- i.** If an alarm sounds, students must leave their examination answer booklets, rough work and examination question papers and evacuate the room quickly and quietly. Under no circumstances should a student remove an answer booklet, rough work or an examination paper from the examination room.
- ii.** It is the responsibility of the student to ensure they are present at the time when the building is re-opened. No students shall (re)enter the examination room until authorized to do so by the chief invigilator.
- iii.** If an examination is re-scheduled it is the responsibility of the student to ascertain the revised schedule and to be present at the designated time and place for the examination.

7.10 An Evacuation Occurring After the Examination Has Started

In the event of an emergency evacuation of the examination room (e.g. when the alarm sounds) any examination, which has already started, shall be terminated.

7.10.1 Student's responsibility

- i.** If an alarm sounds, students must leave their examination answer booklets, rough work and examination question papers and evacuate the room quickly and quietly. Under no circumstances should a student remove an answer booklet, rough work or an examination paper from the examination room.
- ii.** When the building is re-opened, students must not under any circumstances re-enter any examination room unless and until all answer booklets have been collected from the room by an invigilator and they are instructed to re-enter the building by the senior invigilator.
- iii.** Where an examination has been terminated as a result of an emergency evacuation, it is the responsibility of the students to secure information on what alternative form of assessment, if any, is to be required in relation to that subject area, and to present themselves for assessment on the due date. Information will be available from the Registry.

7.11 Procedures in the Event of Severe Disruption to Public Transport or National Emergency Situation

7.11.1 Student's responsibility

- i.** It is the responsibility of each student to find out when and where the examination will take place after the disruption of the originally scheduled examination;
- ii.** It remains the responsibility of the students to be present at the examination room in good time. Students are expected to make such arrangements as may be necessary to ensure that they arrive on time. If students are likely to be affected by any transport disruption, they are advised to investigate immediately alternative travel arrangements, or opportunities for temporary accommodation near the examination location. Students should bear in mind that disruption to public transport inevitably puts pressure on other forms of transport services too, and are advised to allow more time for their journeys irrespective of their mode of travel.
- iii.** Staff marking examination question papers will not make allowances for students' shortage of time, or any other effects of disruption. Faculty and departmental Examination Boards have discretion to consider mitigating

circumstances, which may include missing all or part of an examination due to disruption to public transport. It is the responsibility of any student affected to submit a mitigating circumstances claim to the relevant Registry at the earliest available opportunity.

8.0 INDIVIDUAL EXAMINATION AND ASSESSMENT ARRANGEMENTS

8.1 Concept of Individual Examination and Assessment Arrangements

- i.** Individual arrangements for examinations or assessments may be made for disabled students or students with long-term medical conditions which would affect their ability to undertake the proposed examination or assessment.
- ii.** Individual arrangements may include:
 - a) Additional time for an examination or coursework;
 - b) the provision of sheltered facilities, such as a room for individual students, or a separate room with other students also requiring additional time (including facilities off-site where a student has exceptional difficulties in sitting an examination);
 - c) The completion of work other than in handwriting;
 - d) The provision of the question paper in an alternative form or of an alternative mode of assessment;
 - e) The use of tape, Braille or other facilities, or the employment of an amanuensis and/or reader.
- iii.** The purpose of an individual arrangement shall be to compensate for the restrictions imposed by the disability or medical condition, without impairing the validity of the assessment/examination and without giving unfair advantage relative to other students.

8.2 Procedures for Making a Request for Individual Examination and Assessment

8.2.1 Student's responsibilities

- i.** It is a student's responsibility to notify the University of his or her requirements for support in assessment at the earliest possible opportunity. The University cannot accept responsibility for problems in assessment in cases where a student has chosen not to, or failed to, notify it of their requirements. Retrospective requests for alternative assessment arrangements, or for additional opportunities to sit for assessments, cannot be considered.
- ii.** Disabled students, or students with SpLD (dyslexia (difficulty in reading), dyspraxia (difficulty in remembering), and dyscalculia (difficulty in making arithmetical calculations), should inform the Academic Registrar on entry to their course, so that arrangements can be made to accommodate their requirements for alternative assessments and/or individual examination arrangements.

- iii. Students with a short term or temporary conditions (e.g. a broken limb or other injury) may apply directly to the Academic Registrar, or nominee, for individual examination or assessment arrangements. In all cases such applications must be submitted to the Registry at least six weeks before the relevant examination or assessment. For the purposes of these regulations, 'short term' or 'temporary' shall be defined as a condition that is only expected to affect assessment in the semester to which the claim refers.
- iv. In considering claims for short-term or temporary conditions, the Academic Registrar, or nominee, will undertake whatever consultation is deemed necessary in arriving at a decision on the claim.

8.3 Specific Learning Difficulties (SpLDs) (Dyslexia, Dyspraxia, Dyscalculia)

- i. Students with SpLDs may either elect to undertake their written examinations with an additional time allowance of 15 minutes per hour, in a separate room with other students' also requiring additional time, and access to a Standard English dictionary (or approved foreign language dictionary). Alternatively, students with SpLDs may elect to take their examinations in a computer laboratory set aside for this purpose, with an additional time allowance of 15 minutes per hour.
- ii. The examination answer booklets of all students with SpLDs will be identified with a sticker to alert markers to the need to consult the marker's guidelines.
- iii. Students with SpLDs are permitted to use a personal tinted overlay where required in examinations and in-class tests.

8.4 Chronic or Long-term Conditions

Students with a disability or long term, complex or chronic condition can seek a reasonable adjustment, which means they need not comply with University standard mitigating circumstance procedures. Reasonable adjustment includes not being required to submit repeat mitigating circumstances claims, additional time in examinations, or alternative assessments. Students should register with their Advisers and Head of Departments.

8.5 International Students: Examinations in Other Countries

- i.** Baze University may permit students to sit for examinations outside Nigeria, in cases where:
 - a) an international student who has completed his/her course is required to complete a deferral or referral examination in order to graduate; or
 - b) a student is required to undertake a period of residence abroad as part of his/her course (or on an approved Exchange) and this period of residence coincides with the University examination period.
- ii.** Any student seeking to take an examination overseas must apply formally, to the Registrar for individual assessment arrangements based on special circumstances. In such cases, if the proposal is agreed, an appropriate Nigerian Consul Office will normally be asked to conduct the examination and any costs incurred must be borne by the student.

8.6 Viva Voce Examinations

8.6.1 Definition of viva voce examinations

- i.** A viva voce (meaning, by word of mouth as opposed to writing) examination is an oral examination, typically for an academic qualification, that assesses skills and knowledge.
- ii.** A viva voce examination may be used in conjunction with other forms of assessment to determine an overall mark for a course. Where used for summative assessment, provisions for viva voce examinations must be detailed in the validated course pro-forma, be subject to a marking scheme and be applicable to the whole cohort.
- iii.** Viva voce examinations can only be used to determine a final classification where there is a professional and statutory body (PSB) requirement to do so as in the case with medicine.

8.6.2 Procedures

- i.** A viva voce examination should be conducted by at least two subject specialists prior to the Faculty and departmental Examination Boards. In order to ensure transparency a record of discussions must be made. An External Examiner may see a sample of the written records of discussion, be given access to a video/audio recording, or attend a sample of the viva voce examinations.
- ii.** It is the student's responsibility to ensure they are available for a viva voce examination on the date agreed with the Course Lecturer. Failure to attend without a valid mitigating circumstances claim will be treated as non-attendance.
- iii.** Where a student is aware in advance that they will not be able to attend, the student should liaise with the examiners to try and establish an alternative date. If no agreement can be made it is a student's responsibility to submit a claim of mitigating circumstances.
- iv.** A viva voce examination should take place in term time, or during the allocated re-assessment week, unless otherwise agreed by all parties.

8.6.3 Cases of mitigating circumstances

A viva voce examination may be conducted as an alternative or additional assessment where very exceptional reasons for poor performance have been established and a valid claim of mitigating circumstances has been accepted. The Vice-Chancellor & Dean of Faculty, or nominee, and the Academic Registrar, or nominee, shall liaise to determine the suitability of such a request.

9.0 ACADEMIC MISCONDUCT

Academic misconduct includes any form of cheating which directly or indirectly falsifies the ability of the student. It includes all fraudulent activities such as plagiarism collusion, impersonation and the use of inadmissible material(s) (including any material that breached confidentiality, or that is downloaded from electronic sources).

Academic misconduct applies to any form of assessment including coursework, in-class tests and examinations and covers every form of Examination Irregularity, Misconduct or Malpractice.

9.1 Irregularity

Irregularity shall be deemed to have occurred if the candidate sits for the examination for which (s)he is not eligible, as the case may occur when the candidate:

- a) Does not register for a course
- b) Does not satisfy the attendance requirement of 75%; and
- c) Has not complied with any other requirement(s) prescribed by Senate, Faculty or Department.

9.2 Sanction

Any candidate whose position is irregular as identified under the heading shall not be allowed to sit for the examination. Where the irregularity is discovered after the candidate might have sat for the examination, such paper(s) done under irregular conditions shall be nullified.

9.3 Misconduct

Misconduct shall be deemed to have occurred under the following instances:

- a) Failure to observe silence. The only permissible way of attracting the attention of the invigilator is by candidate raising his/her hand.
- b) Smoking in the examination hall or rooms when examination is in progress
- c) Acts of insubordination or insolence to the invigilator(s)
- d) Fighting in the examination hall; and
- e) Any Act(s) of commission or omission that may negatively affect the smooth conduct of the examination.

9.4 Sanction

All cases of misconduct shall attract a written warning issued by the Dean and copied to the Registrar. Candidates guilty of (b) shall in addition have their cases referred to Student's Disciplinary Committee.

9.5 Malpractice

- i. Examination Malpractice shall be deemed to have occurred under the following circumstances:
 - a) Any act of omission which contravenes any of the provisions of section 3(2) of the miscellaneous offences decree of 1984;
 - b) Any unlawful attempts, acts, omissions, successful or unsuccessful, directed at obtaining pre-knowledge of examination question(s) or influencing the markings of scripts or award of marks by the University or external examiner;
 - c) Any attempts, successful or unsuccessful, to impersonate a candidate in any University examination.

- ii. The following shall constitute impersonation:
 - a) Writing examination for another candidate.
 - b) The exchange of examination numbers or answer scripts/sheets.
 - c) The intentional use of someone else's examination number.

9.6 Plagiarism

- i. **Plagiarism** is an assessment offence and is not permitted in the University. Plagiarism is the submission for assessment of someone else's work (written, visual or oral). Plagiarism may involve the unattributed use of another person's work, ideas, opinions, theory, statistics, graphs, models, paintings, performance, computer code, drawings, quotations of another person's actual spoken or written words, or paraphrases of another person's spoken or written words without due acknowledgement, and passing them off as one's own

- ii. Students are not allowed to re-present any assessment already submitted for one course *as if for the first time* for another course. **Double counting** of assessed work is not normally allowed. If submitting work previously included in another assessment the student should attribute the section of text from the earlier work. In assessing such work markers may take into account work that is deemed not to be original.

9.7 Collusion

- i. **Collusion** is defined as the submission of work, assignment or examination produced in complicity with another person(s), which is based on the assessment of individual work. Such complicity with another person(s) is intended to defraud or gain an unfair advantage. Students are not allowed to include unauthorized members in student teams conducting group work assignments and students may not lend their work which has been submitted for assessment to another student;

Note: Every student should treat his/her academic work as his/her own property and should protect such work. Students should ensure that electronic copies of their work are stored securely and cannot be copied or stolen by another person.

- ii. It is the student's responsibility to ensure (s) he has understood the definition of assessment offences. If a student is unclear about any aspect of plagiarism they should in the first instance contact their Course Lecturer in good time, prior to the submission of coursework.
- iii. For the purpose of this regulation, 'examination' includes both written and oral examinations, and course tests. 'Assessed coursework' includes coursework, essays, assignments, in-class tests, laboratory tests, projects, dissertations, practical work, presentations, placements, or field trip reports, designs, theses, artifacts, digital photographic media, and computer-based analyses, etc.

9.8 Cheating Within the Examination

Cheating within the examination hall involves:

- i. Copying, or attempting to copy, the work of another student, whether by looking at what they have written, or are writing, or by asking them for information, in whatever form. Copying from one another/exchanging answer sheets.
- ii. Bringing in prepared answers, copying from textbooks, notebooks, laboratory specimens and any other instructional aids smuggled into the examination hall.
- iii. Collaborating with lecturer/invigilator where it involves provision of oral/written answers to a student in the examination hall.
- iv. Oral/written communication between and amongst students.
- v. Bringing in prepared answers written on any part of the body
- vi. Refusal to stop writing at the end of an examination

- vii.** Removing (an) examination answer booklet(s) (whether completed or not) from an examination room.
- viii.** Impersonation. Being party to any arrangement whereby a person other than the student fraudulently represents, or intends to represent, the student at an examination.
- ix.** Failing to comply with the instructions of an invigilator or any other instructions published on the examination answer booklet or examination question paper.

9.9 Cheating Outside the Examination Hall

- i.** Cheating outside the examination hall involves:
 - a) Colluding with a member of staff to modify or on his own initiative modify students' scores, answer scripts or mark sheet.
 - b) Colluding with a member of staff in order to submit a new answer script as a substitute for original script after an examination.
 - c) Writing of project, laboratory or field reports on behalf of a student by staff.
 - d) Soliciting for help after examination.
 - e) Secretly breaking into a staff office or departmental office in order to obtain question papers, answer scripts or mark sheets or to substitute a fresh script for the original script.
 - a) Refusal to cooperate the investigation panel in the investigation of examination malpractice.
 - g) Obtaining, or attempting to obtain, access to examination papers prior to the start of the examination.
- ii.** The introduction and/or use in an examination room of books, notes, papers or devices of any kind other than those specifically permitted in the rubric of the paper. This includes, for example, the use of a memory calculator where the rubric provides for an ordinary calculator, and the use of any paper other than official examination stationery supplied by the University.
- iii.** The reproduction in examination conditions of material originally produced by another person or persons, without acknowledgement, in such a way that the work could be assumed to be the student's own.

- iv. The unauthorized and unattributed use of work produced by another student, or the use of any published material in such a way as to indicate the student is the original author.
- v. Behaving in a manner likely to prejudice the academic performance of another student(s).
- vi. Offering a bribe, or inducement to any member of staff of the University, or any external invigilator or examiner, connected with the examinations or assessment.
- vii. Any attempt to misrepresent a student's record of achievement, such as results published on-line, student course profiles, student transcripts, Diploma Supplements or Award Certificates, is an offence within these regulations.

9.10 Procedures in the Event of Suspected Academic Misconduct

- i. Please refer to the procedures set out in regulations in the event of academic misconduct during an examination(s).
- ii. Suspected academic misconduct in relation to coursework can be dealt with through one, or more of the following procedures according to the severity, the proportion of the course mark allocated to the work in question, and whether or not the academic misconduct is a first offence:
 - a) By the internal examiner in consultation with the designated Student Casework Administrator and Course Lecturer
 - b) By a panel convened on behalf of the relevant Students Disciplinary Committee
 - c) By a University level Committee of Investigation
- iii. Where the academic misconduct is not a first offence, and/or where it is considered to be of a serious nature, and/or where it is in relation to a piece of work which contributes greater than 30% of a course mark, the academic misconduct must be dealt with in accordance with Stage 2, or Stage 3.

9.11 Sanctions for Examination Malpractices

- i.** Categories of offences which attract expulsion from the University are:
 - a) Impersonation at Examination
 - b) Exchange of answer sheets or any material such as question papers containing jottings relevant to the ongoing examination.
 - c) Introduction and use of relevant unauthorized materials in the examination hall
 - d) Illegal removal of examination script.
 - e) Any kind of mischief that is likely to hinder the smooth conduct of the examination such as physical violence, flooding, fire, etc.
 - f) Cheating outside the hall e.g. in the toilet.
 - g) Collaboration with or copying from another candidate
 - h) Any offence, which falls under category 5.9.2 and 5.9.3 committed by a student previously rusticated.
- ii.** Category of offences that invites a maximum of one year rustication:
 - a) Facilitating/abetting cheating
 - b) Introduction of relevant unauthorized materials to the examination hall even if not used.
 - c) Act of misconduct such as speaking / conversing during examination.
 - d) An offence of category 5.9.3 committed by a previously warned student
 - e) Any other malpractice(s) deemed by the Examination Malpractice Committee to warrant rustication
- iii.** Category of offences which invites warning:
 - a) Introduction of unauthorized, relevant material to examination hall.
 - b) Writing on question paper.
 - c) Any other malpractice(s) deemed by the Examination Malpractice Committee to warrant rustication.

9.12 Appeals

- i.** A student may only appeal against a decision taken at any stage of the procedures on the basis that:
 - a) There is new evidence which was not previously available and which has a direct bearing on the case against the student;
 - b) There has been material procedural irregularity in the conduct of the examination and/or the assessment offences procedures; or
 - c) There has been procedural unfairness in the conduct of the examination and assessment offences procedures.

In such cases, the student should submit their appeal (together with any new evidence) to the Registrar normally within 10 working days of the date of the decision being appealed. The Academic Registrar will evaluate the appeal (and any new evidence) in the light of the record of the case to date and, where appropriate, convene (or reconvene) a Committee of Investigation.

- ii.** If following an evaluation of the appeal the Academic Registrar deems it inappropriate to convene, or reconvene a Committee of Investigation, this decision will constitute the final stage of the appeals process and a Completion of Procedures letter will be issued to the student. Following the completion of the University's internal procedures, the student may be eligible to apply to the Office of the Independent Adjudicator (OIA) for an external review of the appeal.

9.13 Mitigating Circumstances (MCs)

- i.** Students are expected to plan their work, so they can attend all lectures and meet assessment deadlines at the same time as other obligations which they may have both inside and outside the University. The mitigating circumstances process should only be used by students who experience significant, unforeseen disruptions to their studies in circumstances over which they had no control.

9.13.1 Definition of mitigating circumstances

- i.** Mitigating circumstances are defined as serious unforeseen, unpreventable circumstances that significantly disrupt a student's ability to undertake assessment.

9.13.2 Student responsibilities

- i.** It is the student's responsibility to ensure (s)he has read and understood the assessment regulations and to seek further information and guidance from the student's Personal Tutor and/or the Registry. A student's misinterpretation or lack of awareness of these regulations will not be considered a valid reason for non-compliance.

9.13.3 Grounds for submitting mitigating circumstances

- i.** A mitigating circumstances claim should be submitted if valid detrimental circumstances result in:
 - a) the late or non-submission of coursework; or
 - b) non-participation in assessment and/or non-attendance of examination(s).
- ii.** The University operates a 'fit to sit' policy which means that when a student submits his or her coursework or sits for an examination and/or in-class test, it is believed that the student deems himself / herself fit to do so. Therefore the University does not normally consider claims of performance affected. A mitigating circumstances claim cannot normally then be considered for poor performance within the assessment(s). It is the responsibility of the student to determine if (s)he is fit to participate in assessment or if a mitigating circumstances claim should be submitted for non-participation.
- iii.** Where a student is unfit to make reasonable judgement on his / her ability to undertake assessment, due to mental illness or other exceptional circumstances, or is taken ill during an examination, a mitigating circumstances claim may be submitted where this can be supported by original medical evidence.
- iv.** When students apply for non-submission and/or non-attendance they must indicate in their statement that their claim is for 'performance affected'. Where such a claim is accepted, the student will be offered the opportunity to re-attempt the assessment(s) in question without penalty. The original attempt during which the mitigating circumstances occurred will be discounted.

9.13.4 Procedure for Submitting a Claim for Mitigating Circumstances

- v.** Students must submit a mitigating circumstances claim in writing to the Registry through their Head of Department at the earliest available opportunity. Such claims should normally be submitted within one month of the circumstances occurring and all claims must be supported by original documentary evidence.
- vi.** It is the student's responsibility to ensure all relevant information and supporting documentary evidence is made available to the Registry. Students should be aware that discussing their circumstances with staff does not constitute a submission of a mitigating circumstances claim. Students must keep a copy of the submitted claim and evidence.

9.13.5 Timescale for Submission of Mitigating Circumstances Claims

- vi. Students should submit claims as close as possible to the time when the difficult circumstances occurred and normally within one month of the mitigating circumstances occurring.
- vii. Late claims will not normally be considered, other than in highly exceptional circumstances, where the problems encountered by the student justify the lateness of the claim as well as the claim itself.

9.13.6 Absolute Conditions for Acceptance of Claims

- i. For a mitigating circumstances claim to be accepted all of the following absolute conditions must be met, with the exception of claims relating to students' participation in religious pilgrimages. A student must produce independent documentary evidence to show that the circumstances:
 - a) Were unforeseen;
 - b) Were out of their control and could not have been prevented;
 - c) Relate directly to the timing of the assessment affected; and
 - d) Meet the relevant specific conditions relating to documentary evidence
- ii. It is the student's responsibility to ensure that their application meets all of the absolute conditions above.

9.13.7 Independent documentary evidence

- i. In all cases, claims must be substantiated by original independent documentary evidence. This must be an official document e.g. a letter signed on official headed paper, and must include the dates during which the circumstances applied. In the case of evidence relating to medical conditions, this must take the form of a medical certificate or doctor's letter that is either obtained at the time of the illness or evidence that makes it clear that the student was unwell at the time. The certificate should state the time and duration of the illness and include a clear medical opinion.
- ii. A note from the doctor indicating that the student told them they were unwell will not normally be accepted; and self-certification cannot be accepted.
- iii. Copies of documentary evidence, other than officially certified copies of death certificates, will not be accepted. If a student needs an original document for another purpose, they must bring both the original and the copy into the Registry so that the copy can formally be authenticated.
- iv. A student may seek a supporting statement from their Personal Tutor (or other suitably qualified member of University staff), in order to help them to articulate

his or her claim, if that individual is aware of the circumstances and their effects, although this cannot, in itself, constitute independent documentary evidence.

- v.** Documentary evidence must be presented in English and, where required, translations must be provided using an authorized translator.
- vi.** Evidence sent by fax does not constitute submission of evidence. : If documentation is faxed, the decision of Mitigating Circumstances Panel members will not be confirmed until the original documentation has been submitted and received.
- vii.** The University reserves the right to check the authenticity of all documentation submitted as part of a mitigating circumstances claim. Any student who submits documentation that is not authentic will be investigated in accordance with the Student Disciplinary Procedure and may be liable to criminal charges.

10.0 MARKING, REMARKING, EXAMINATION AND ASSESSMENT ARRANGEMENTS

- i.** Marking is the process of assessing a piece of work, submitted or presented by a student, against agreed marking criteria and mark/grade descriptors to arrive at the award of a numerical score or grade for that piece of work.
- ii.** Moderation is the process of reviewing the marks awarded to a full set of assessed work to provide assurance that assessment criteria have been applied appropriately and consistently.
- iii.** External scrutiny is the process of providing external assurance, by way of the external examiner system, that academic standards are appropriate and comparable with the sector, and that the assessment process has been conducted fairly, consistently and in accordance with published policies and regulations.

10.1 Remarking

- i.** When a student feels very strongly that scores awarded to him in any given course, (s)he may request for his or her scripts to be remarked.
- ii.** The student requesting for a remark shall write to the Academic Registrar through his or her HOD and the Dean of his or her faculty and shall be required to pay the remarking fees as approved by the Senate.
- iii.** On the receipt of the application for a remark, the Academic registrar shall call for the student's script(s) and the Dean of the Faculty shall arrange for another staff who is an expert in that area to remark the student script(s) using the original marking scheme.
- iv.** The remark score shall replace the score originally awarded to the student.

10.2 Assessment Arrangement

10.2.1 Student's responsibilities

- i.** It is a student's responsibility to ensure that (s)he:
 - a) registers for the correct courses by the published deadline in the University Calendar;
 - b) is eligible for assessment, or reassessment in accordance with the appropriate undergraduate or postgraduate course units specific regulations; and
 - c) applies for change of course , if necessary, by the published deadline in the University Calendar.

10.3 General Course assessment regulations

- i.** A student, who has not fully completed enrolment or is in financial debt to the University, is not eligible to undertake any course assessment. Any student, who has not fully completed the University enrolment before the deadline for registration, shall not be assessed.
- ii.** Baze University shall publish relevant information for every course leading to a specified award. The details shall include:
 - a) intended learning outcomes;
 - b) type, timing and content of assessment for each aspect of the course;
 - c) weighting of each element of assessment;
 - d) arrangements for the submission of coursework, submission deadlines and the return of both marked work and feedback;
 - e) Conditions for progression to the next stage of the course;
 - f) requirements for the award of qualification(s);
 - g) decisions open to the Faculty and departmental Examination Boards where the student fails any part of the course;
 - h) action(s) to be taken where failure was due to illness or other mitigating circumstances considered as valid within University regulations.
- iii.** Course assessment regulations must be consistent with both the assessment regulations of the University and with the regulations of NUC and any external validating or Professional, Statutory and Regulatory Body (PSRB) such as COREN, CLE ANAN, which recognizes or accredits the course.
- iv.** Where there is a conflict between the University assessment regulations and those of a PSRB, accrediting a qualifying award of that body, the regulations of the external accreditation body will take precedence.
- v.** Where there is conflict between the course assessment regulations and those of the University, the University regulations will take precedence, except where the variance has been formally approved by the Academic Registrar through validation, review or the major modifications process.
- vi.** Assessment regulations relating to the course must be published and made available to students at the beginning of each academic session in the course handbook.

- vii. Changes to course assessment regulations may only be made in accordance with the procedures set out in the Baze University Policies, Procedures and Regulations Handbook. Any change that may significantly affect the progress or future assessment of students already registered, must be carried out only after appropriate consultation with the students, in the semester prior to the change being introduced.
- viii. Assessment must be appropriate to the subject being studied, the mode of learning and to the students taking the course or courses, and must be marked and moderated by competent and impartial examiners, against published marking schemes (assessment criteria and methods), which enable them to assess students fairly and consistently.

10.4 Failure and Reassessment: General Requirements

- i. Course assessment regulations must specify which elements and how many elements of assessment must be passed for attainment of an award and make provision for a student to make good any initial failure.
- ii. Students will not be permitted to improve upon a mark or grade above the pass level required for the course or award.
- iv. Where a particular course is no longer offered and/or it is not practicable for students to be reassessed in the same elements or an alternative course(s), the Faculty and Departmental Examination Boards may at its discretion, make special arrangements as it deems appropriate.

11.0 REGULATIONS FOR SEMESTER RESULTS

11.1 Determining semester results

- i. Semester grades are calculated as Grade point average (GPA) on the basis of:
 - A = 4
 - B = 3
 - C = 2
 - D = 1
 - F = 0
- ii. Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) are derived from the actual percentage scores obtained in a given course as shown below:

<u>Letter grade</u>	<u>% Score</u>	<u>Grade Point</u>
A	70% - 100%	4.0
B	60% - 69%	3.0
C	50% - 59%	2.0
D	45% - 49%	1.0
F	0 - 44%	0.0
I	Incomplete	-

- iii. CGPA is on a scale of 4.0, and all degree Classifications and honors conform to the grading system as shown above

11.2 Grade System

- i. The grades A, B, C, D and F equate to the following performance levels:
 - A – Exceptional work that demonstrates the student’s perfect understanding of the subject.
 - B – Above average work that represents a very good understanding of the subject
 - C – Represents average work that demonstrates an adequate understanding of the subject
 - D – Below average work considered passable but also demonstrates gaps in knowledge of the subject
 - F – Less than passable work that shows significant shortcomings in the students understanding of the subject.
 - I – The student has not completed all components of the course for a genuine reason and as such has NOT proven understanding of the course

11.3 Course Outcome/Decision

- i. The overall decision on a student’s performance in a course shall be as follows:
 - i) Pass, which means that the student has satisfied the mandate of the course.
 - ii) RM, which means that the student is required to retake the course.
- ii. The minimum module pass mark of 45% or GP 1.0 is required for graduation in degree programmes.
- iii. A weighted Grade point shall be determined for the performance of each course by multiplying the GP obtained in the course by the credit load of the course excluding any ‘incomplete’ grade.
- iv. A GPA shall be calculated for a semester by adding up the weighted GPs obtained in all the modules taken in the semester and dividing the sum by the total value of the credits of all the modules, excluding any incomplete grades.
- v. Failure in any module shall be recorded as such and can only be redeemed by retaking and passing the module and all its components (attendance, continuous assessments and examinations) at the next available opportunity subject to the conditions for withdrawal and probation. In such a case, students will be credited with the full marks earned, but both the initial GP and the retake GP count towards the CGPA.
- vi. A student who is absent from any examination without proven cause shall be deemed to have failed the module and a GP of 0.0 will be recorded. All rules guarding failed modules shall apply in such a case.

vii. Where the results of a student are corrected after approval by Senate (such as confirming that a student reported absent had sat for and passed the examination), the corrected result shall be reflected in the semester the modules were taken and the normal approval process shall be followed to get the corrected results approved and recorded in all concerned units.

vii A student who is absent from any examination on genuine and proven grounds whose claims of mitigating circumstances have been approved shall be awarded a grade of 'I - Incomplete'. This allows the student to retake the module as a first attempt. The GP from the initial attempt is not computed towards the GPA of the student.

11.4 Publishing Semester Results

- i.** After the Faculty Board has decided on the recommendation to be made to the Senate as in (section on Academic boards) the examination office may publish the results to the students as provisional examination results subject to approval by senate.
- ii.** The students shall be notified of their results through their students' portal and their university assigned email addresses. The statement of results sent to the students must indicate student name, student registration number and must be clearly marked "This is Not a Transcript".
- iii.** After the Senate has approved the results, the Registrar may notify students that have been determined to be eligible for probation or withdrawal from the University.
- iii.** All students' status will also be published at this time.

12.0 STUDENT PROGRESSION GUIDELINE FOR DEGREE PROGRAMME

12.1 General Regulation on Student Progression

12.1.1 Principles of progression rules

- i)** The Cumulative Grade Point Average (CGPA) should be used as a guide for assessing students for withdrawal and probation taking into account the minimum CGPA of 1.0 required for graduation.
- ii)** Subject to the conditions for withdrawal and probation, a student may be allowed to repeat the failed course(s) at the next available opportunity, provided that the total number of credit units carried during that semester does not exceed 24, and the Grade Points earned at all attempts shall count towards the CGPA.
- iii)** 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 1.0 at the end of a particular year of study, earns a period of probation for one academic session.

- iv) A candidate whose Cumulative Grade Point Average is below 1.0 at the end of a particular period of probation should be required to withdraw from the University. However, where a student has demonstrated early poor performance with CGPA of less than 1.0 in the first and second semesters of 100Level, the student should be advised to withdraw from the programme.

12.1.2 Students progress and pre-requisites

Where pre-requisites courses are available students shall be properly informed and guided by the Department and their advisers.

These pre-requisites modules are expected to run at different levels e.g. 100l modules being a pre-requisite for a 200l module. The pre-requisites should not be between semesters at the same level.

These regulations, unless the context otherwise admits:

- i. All references to teaching period in this policy shall mean semester.
- ii. Academic status is the classification of the students' academic progress in their studies at any one point in time, based on the students' academic performance at the end of the previous teaching period in which they were enrolled.
- iii. The classifications possible are:
 - **Good standing:** this applies to students who have just begun their programme at Baze University and/or their academic performance in the most recent teaching period is satisfactory.
 - **Probation:** is the academic status assigned to students whose most recent teaching period marks at the end of the semester are less than satisfactory in the courses they enrolled in.

Where the student's CGPA falls below 1.0 at the end of the academic session, he or she can only maintain this status for one academic session after which he/she is withdrawn from the programme.
 - **Academic exclusion:** this refers to when a student is not permitted to continue on their current academic programme or transfer to a programme with the same inherent requirements, due to unsatisfactory performance or having insufficient time remaining to complete the programme within the maximum time to complete.
 - **Withdrawal:** this is the academic status assigned to a student who has performed unsatisfactorily after being placed on probation and/or academic exclusion and is terminated from the university.
- iv. **Core course:** a course which is mandatory or core in order to complete the prescribed requirements of the academic programme.

- v. **Maximum time to complete:** is the maximum time that a student is allowed to remain in a programme. A student shall not exceed an additional 50% of the normal duration of the programme. As such a 4-year programme must be completed within 6 (six) years and a direct entry student (student with prior certification admitted into 200 level) must not exceed 4½ years.
- vi. **Satisfactory academic progress:** this means that a student has achieved module results in each teaching period that are equal to or better than the University's minimum academic standards as set out in this policy, and where applicable, has met the conditions placed on the approval for the student to continue in the programme.

12.1.3 Students' responsibilities

- i. The University has the following expectations:
 - a. Students must acquaint themselves with University policies and procedures relevant to their enrollment and programme of study, including the relevant Award Requirements for their programme, the most up to date module outlines for modules they are enrolled in, and any other requirements relevant to their specific modules or programme.
 - b. Students must make genuine attempts to progress academically by meeting expectations associated with attendance, module assessment requirements and by taking responsibility for their academic performance.
 - c. While it is hoped that students will want to exceed the University's expectations and excel in their studies, students are expected to at least achieve minimum academic standards in each teaching period in order to maintain satisfactory academic performance.
 - d. Students who believe that their personal circumstances may impact on their ability to meet the University's expectations on probation progress, are advised to seek advice and take action as early as possible.
 - e. Students must keep themselves apprised of their academic progress and they have a responsibility of ensuring the completeness of their academic records.

12.2 Expectation When Carrying Over a Module

- i. Unless granted an exemption by the Dean of Faculty, a student who retakes a course must:
 - a. not have achieved a passing grade in the course in a previous attempt;
 - b. participate in the learning experiences provided for the course; and
 - c. meet all the examination, assessment and attendance requirements for the course.

13.0 PHILOSOPHY, AIMS AND OBJECTIVES OF THE DEGREE PROGRAMME IN CHEMISTRY

Chemistry is critical to understand the world around us. It is the science of composition, structure, properties, and reactions of matter, especially of atomic and molecular systems. There are few areas of developing scientific knowledge and technology that do not rely heavily on chemistry; those that do include medicine, human health, biotechnology, materials science, biology, applied physics, microscopy, geology, and environmental science, among others. Every day we utilise products developed by experimental chemists: paints, plastics, fabrics, synthetic petrol, dyes and drugs, to name but a few.

In the Chemistry Department at Baze, we seek to explore and expand the frontiers of modern chemistry. A degree programme in chemistry should foster in the undergraduate an appreciation of the centrality of chemical sciences to human's well-being, as well as its inevitable linkage to, and interactions with, other branches of science.

A degree programme in chemistry should therefore aim to:

- Investigate the structure and dynamics of atomic and molecular systems
- Develop new experimental tools and theoretical approaches to understand and control atomic and molecular behavior.
- Stimulate in the students sustained interest and enthusiasm in chemical sciences and applications and thus quest for postgraduate studies and research.
- Build in a culture of continuing enquiry and stimulate student's interest and enthusiasm in chemical sciences and applications.
- Inculcate in students an appreciation of chemistry in all human endeavors, and thus provide confidence for employment.

The programme is organized into four levels, 100 through 400. Level 100 provides a general background in computing, science and society as well as training in learning and communication skills. Level 200 develops fundamental knowledge and skills in Chemistry. Level 300 emphasize the core modules in Chemistry, supported with electives for broad knowledge, while at Level 400 students take a Major Project for research in order to inculcate some level of skills for scientific investigation. The stage is also preparatory for laying sound knowledge for making competent decision on future area specialization in higher degree programme.

A module (British) is equivalent to a course (Nigeria). Students take between 4 to 6 modules/courses per semester, ensuring they satisfy BMAS Science 2007 (at least 15 units) and British Universities' requirements (60 credits).

13.1 Entrance Requirements

Table 1 presents the summary of admission requirements into Chemistry programme of Baze University and mode of entry.

Table 1: Specific requirements for admission into chemistry programme

Direct Entry	O' Level	UTME Subjects
(i) Two 'A' Level passes in Chemistry and any of Physics, Math, or Biology.	5 SSCE credits to include English, Math, Chemistry, Biology and Physics	Chemistry and two of Physics, Biology, and Math.
(ii) ND/NCE with good grades in relevant 'O' Level Subjects.		

13.2 Career Opportunities

A qualification in chemistry opens doors to a wide range of careers. Chemistry is involved in our everyday lives and there is a vast range of jobs and careers open to those who have studied chemistry at any level; great career opportunities exist both inside and outside the lab. Chemists are employed by such industries as Fine and Heavy Chemical Manufacturing, Food and Beverage Production, Mining and Metallurgy, Petroleum, Pharmaceuticals/Drugs, Plastics Pulp and Paper, Waste Management, Water and Air Quality Management, and Research and Development.

13.3 Programme Structure

The department of Chemistry offers a 4 year degree programme for OTME candidates, and a 3 year degree programme for Direct-Entry candidates. There are two semesters of formal University studies in each academic session. At the 300 level, each student is expected to go for a 6 months Students Industrial Work Experience Scheme (SIWES), after completion of the first semester courses. At the end of the SIWES industrial attachment, the student is required to submit a written report on what (s)he has learnt in the industry and is also required to present and defend the report. At 400 level, students undertake a major project in any field of interest in Chemistry besides the usual prescribed courses.

13.4 Programme Duration

A student in the Chemistry Department shall normally complete the programme in eight (8) semesters. However, students with carryover may be allowed to continue for a total of twelve (12) semesters and still qualify for a degree provided (s)he maintains a CGPA of 1.50 and above. Any student who is unable to complete the programme in twelve (12) semesters may be allowed to continue for an additional two (2) semesters.

13.5 Semester Duration

A minimum of twelve (12) weeks shall normally be reserved for teaching, excluding public holidays and semester breaks. One (1) to three (3) weeks are reserved for examinations after the teaching period.

13.6 Requirements for Graduation

For a candidate to be eligible for graduation and the award of a degree of Bachelor of Science in Chemistry, the candidate must have successfully completed all the prescribed courses as contained in this programme curriculum, and must attain the following:

- i. A pass grade in Supervised Industrial Work Experience Scheme (SIWES);
- ii. A minimum CGPA of 1.50;
- iii. A minimum of 160 credit units
- iv. A pass grade in all prescribed core courses of the programme;
- v. A student may take some elective courses to meet the graduation requirement.

14.0 REGISTRATION OF COURSES

14.1 Core Courses:

Every student is expected to register all departmental core courses as well as GST (General studies) courses as prescribed by the University.

14.2 Elective Courses:

In addition to the **core courses**, a student is expected to register **elective courses** in order to meet the minimum number of units required for graduation. The elective courses are courses which the student chooses according to his/her interest and on the advice or guidance of his/her course adviser. It is advisable that the student passes the elective courses registered as these will form part of the results computation.

14.3 Pre-requisites:

A pre-requisite course is one which must be taken and passed before the student can register for a more advanced course.

15.0 SCORING AND GRADING SYSTEM

15.1 Computation of GPA and CGPA

Each student is expected to be able to calculate his/her Grade Point Average (GPA) at the end of each semester and the Cumulative Grade Point Average (CGPA) at the end of two or more semesters or sessions.

The course unit system is a system whereby programmes are designed with courses which are weighted and classified into various levels for students in the institution of higher learning. Courses are assigned units depending on the volume of work required to complete the course and this includes lectures, tutorials, practicals. The courses can be taken at any level by any student provided there are no (constraints) prerequisites for these courses. For instance, a part I student can offer a course at any level provided the student has the prerequisites required for the course, while a Part IV student can still offer a part I course if such a student so desires. However it is generally desirable that lower level core courses are taken and passed before proceeding to high level ones.

The system allows a student to spread his programme evenly over the semesters provided such a student keeps to the rules and regulations of the system. For instance there are minimum and maximum numbers of units a student can register for in a semester. Every semester is as important as the other. A wise student is encouraged to attempt a reasonable number of units (s)he can cope with to ensure a qualitative performance.

Apart from the end of semester examination, there are continuous assessments during each semester. These tests and the end of the semester examination make up the set of semester examinations for each course.

The following sections explain the procedure for computing the Grade Point Average (**GPA**) for each set of semester examinations and for upgrading the computations to obtain the Cumulative Grade Point Average (**CGPA**) at any point in time during each student's course of study.

It is strongly advised that every student should learn how to compute (and actually do compute his own) GPA and CGPA. Computing and keeping a record of the CGPA enables the student to be fully aware of what effort he must put in to remain in the University or to graduate in a desired class. This is the only way the student can guard and monitor the quality of his efforts.

There is no Resit Examination in Nigerian Universities. Therefore any course failed has to be repeated when it is available and must be passed before graduation. Students are strongly advised to consult with their course advisers or tutors before registering for courses, and on other academic problems that they may have. It is necessary to first understand and be thoroughly familiar with certain terminologies and abbreviations that are commonly used in the computation of Grade Point Average. These are defined as follows:

15.2 Student workload:

This is defined in terms of courses units. One unit represents one hour of lecture or one hour of Tutorial or 3 hours of practical work per week throughout a semester. Thus for example, a course in which there are 2 hours of lectures and 1 hour of Tutorial per week is a 3-unit course. Similarly, a course in which there are 2 hours of lecture 1 hour of Tutorial and 3 hours of practical per week is a 4- unit course.

15.3 Total Load Units (TLU):

This is the total number of course units registered by a student in a particular semester. It is the summation of the load Units on all Courses carried during the semester. For example, a student who is carrying 6 courses of 3 units each has a **TLU** of 18 for that semester.

15.4 Cumulative Load Units (CLU):

This is the summation of Total Load units over all the semesters from the beginning to date. A student who is prone to repeating courses will finish (if he does not drop out) with a higher **CLU** than his non- repeating colleague and will most likely require a longer time to complete requirements for the award of Degrees.

15.5 Level of Performance Rating (Credit Points Per unit):

This is the rating of grades obtained in terms of credit points per load unit. The rating used is as follows:

Grading:

Mark %	Letter Grade	Grade Point
70 - 100	A	4
60 - 69	B	3
50 - 59	C	2
45 - 49	D	1
0 - 45	F	0

Based on the above, a student who obtained a grade of 'A' in a 3-unit course has scored **12** Credit points, and one who obtained a grade of C in that course has scored **4** Credit points.

15.6 Total Credit Points (TCP):

Total Credit Point (TCP) is the sum of the products of the course units and rating in each course, for the entire semester period. For example, consider a student who took four courses of 3-units each. Let's say the grade obtained in the four courses were C, B, F, and D respectively. The **TCP** of this study is obtained as follows:

$$\text{TCP} = (3 \times 2) + (3 \times 3) + (3 \times 0) + (3 \times 1) = \mathbf{18}.$$

15.7 Cumulative Total Credit Points (CTCP):

Cumulative Total Credit Point (**CTCP**) is the summation of Total credit points (**TCPs**) over all semesters from beginning to date.

15.8 Total Load Units [TLU].

Total Load Units [TLU] is the sum of all credit loads for the semester.

15.9 Cumulative Total Load Units (CTLU):

Cumulative Total Load Units (**CTLU**) is the summation of Total Load Units (**TLUs**) over all semesters from beginning to date.

15.10 Grade Point Average (GPA):

Grade Point Average (GPA) is the total credit points [TCP] divided by the total load units [TLU].

$$\text{GPA} = (\text{TCP}) / (\text{TLU})$$

For example, consider the student whose scores are:

A, C, B, F, and D in five 3-units courses.

His **TCP** is = $(3 \times 4) + (3 \times 2) + (3 \times 3) + (3 \times 0) + (3 \times 1) = 30$ as explained earlier on, and of course, his **TLU** is 15. [i.e. 5 courses at 3 units each, for the semester].

The highest GPA that can be earned is **4.0** and that is when a student has earned a grade of 'A' in every course during the semester. The lowest GPA obtainable is **0.0** and this would happen if the student has "F" all round during the semester.

15.11 Cumulative Grade Point Average [CGPA]:

This is not the summation of GPAs for all semesters. Rather, it is the summation of **TCPs** for all semesters, divided by the summation of **TLUs** for the said semesters. Like the GPA, CGPA, obtainable ranges from 0 to 4. Table 2 illustrates a summary of computation.

Table 2. Summary of Computation of Grade Points

(i) Credit Units	(ii) Percentile Scores	(iii) Letter Grades	(iv) Grade Points (GP)	(v) Cumulative Grade Point Average (CGPA)	(vi) Cumulative Grade Point Average	(vii) Class of degree
Vary according to contact hours assigned to each course per week per semester	70 - 100	A	4	Delivered by multiplying (i) and (iv) and Dividing by Total Credit Units	4.50 – 5.00	First Class
	60 - 69	B	3		3.50 – 4.49	2 nd Class Upper
	50 - 59	C	2		2.40 – 3.49	2 nd Class Lower
	45 - 49	D	1		1.50 – 2.39	Third Class
	0 - 44	F	0		0 – 1.49	Fail

CGPA calculation is on all courses, but excluding Special Electives.

Example 1: Extract of a student's performance at 100 level 1st semester

(i) Course Code	(ii) Credit Units	(iii) Mark obtained	(iv) Letter Grade	(v) Grade Point	(vi) Credit Points (ii) x (v)
COM 101	3	65	B	3	9
COM 103	3	45	D	1	3
GEN 101	3	55	C	2	6
CHM 101	3	34	F	0	0
MTH101	3	72	A	4	12
	TLU = 15				TCP = 30

$$\text{GPA} = (\text{TCP}) / (\text{TLU}) = 30/15 = 2.0$$

Example 2: Extract of the same student's performance at 100 level 2nd semester

(i)	(ii)	(iii)	(iv)	(v)	(vi)
Course Code	Credit Units	Mark obtained	Letter Grade	Grade Point	Credit Points (ii) x (v)
COM 102	3	75	A	4	12
COM 104	3	45	D	1	3
PHY 102	3	63	B	3	9
BIO 102	3	52	C	2	6
	TLU = 12				TCP = 30

$$\text{GPA} = (\text{TCP}) / (\text{TLU}) = 30/12 = 2.5$$

To compute the Cumulative Grade Point Average (CGPA) for the two semesters, we proceed as follows:

$$\text{CGPA} = (\text{Sum of TCPs}) / (\text{Sum of TLUs}) = (\text{CTCP}) / (\text{CTLU})$$

$$= (30 + 30) / (15 + 12) = 60 / 27 = 2.22$$

15.12 Withdrawal from the University

A student whose **CGPA** falls below 1.50 at the end of a semester, shall be placed on probation during the following semester. If the student fails to achieve a CGPA of at least 1.50 at the end of that semester, (s) he shall be required to withdraw from the programme and may seek transfer into another programme in the University.

15.13 Release of Examination Results.

The Registrar shall publish the results of the students for the award of the B.Sc. Chemistry degree after Senate shall have approved them. Students are required to check the semester and final examination results online.

16.0 EXAMINER SYSTEM

16.1 Internal Examiner

There shall be a board of Internal Examiners whose duty shall be to ensure that course contents have been adequately covered and questions are in line with what has been taught.

16.2 External Examiner

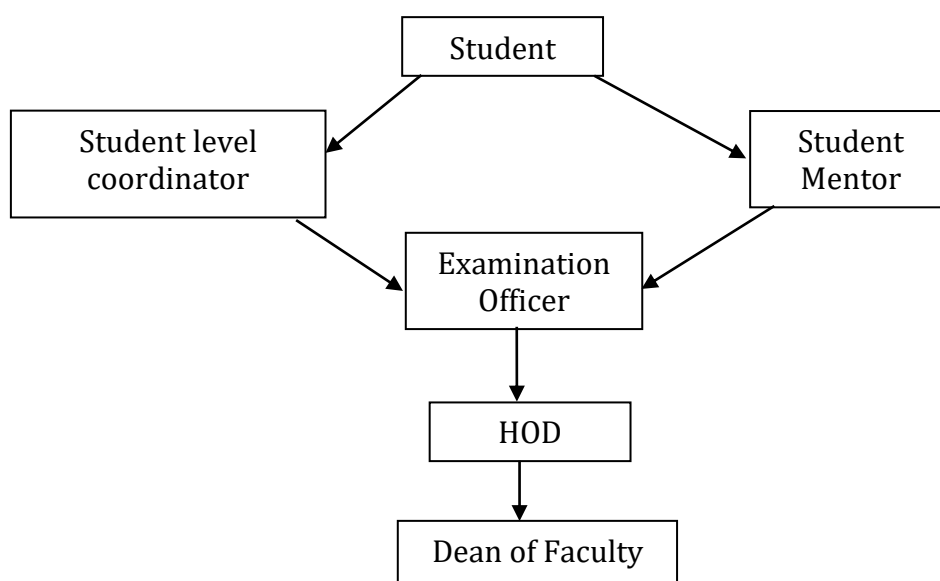
External Examiners shall be appointed only for the final year of the undergraduate programme to assess the final year courses and projects, and to certify that the overall performance of the graduating students as well as the quality of the facilities, teaching and questions meet international standards.

17.0 STUDENTS' INDUSTRIAL TRAINING RATING AND ASSESSMENT

All students taking any degree in the sciences must undergo a minimum of six months Industrial training which carries 6 credit units. Students under the Students Industrial Work Experience Scheme (SIWES) are assessed using the log book, a report and a seminar presentation.

18.0 PROCEDURE FOR RESOLVING ISSUES WITHIN THE DEPARTMENT

A student is expected to channel issues that affect him/her through his / her course level coordinator or the Academic student adviser or mentor. If the level coordinator or the mentor is unable to handle the issue, the student shall forward the matter to the Examination Officer if it is academic related or the Head of department. Where it is not possible to resolve the matter through the above channels, the matter shall be reported to the Dean of the Faculty.



19.0 COURSE STRUCTURE FOR B.Sc. CHEMISTRY

Programme by Level and Semester

Level 100

Semester I			Semester II		
Code	Title	Units	Code	Title	Units
MTH101	Basic Mathematics 1	3	MTH102	Calculus	3
CHM101	General Chemistry 1	3	BIO102	General Biology 2	3
PHY101	General Physics I	3	PHY102	General Physics 2	2
PHY107	General Physics 1 practical	1	PHY108	Practical Physics 2	1
COM112	Intro. To computer science	3	COM111	Intro. To problem solving	3
BIO101	General Biology 1	3	CHM102	General Chemistry 2	3
BIO107	Practical Biology 1	1	CHM108	Practical Chemistry 2	1
GST101	Use of English 1	3	GST104	Use of English 2	3
GST102	History of Ideas, Sci. & Soc. I	2	GST105	History of Ideas, Sci. & Soc. 2	2
CHM107	Practical chemistry 1	1	BIO108	Practical Biology 2	1
	Total	23		Total	22

A minimum of 45 Credit Units at 100 level

Pre-requisites: There are no prerequisites.

Specialization requirements: There are no individual specialization requirements.

Level 200

Semester I			Semester II		
Code	Title	Units	Code	Title	Units
PHY201	Elementary Modern Physics	3	GST222	Peace Studies & Conflict Reason	2
CHM201	Organic Chemistry 1	3	CHM202	Inorganic Chemistry 1	2
CHM203	Analytical Chemistry 1	2	CHM204	Structure and Bonding	2
MTH201	Mathematical Methods	3	PHY202	Electronics	3
CHM205	Practical Chemistry 3	1	CHM206	Organic Chemistry 2	2
GST201	Entrepreneurship Studies	2	GST202	Communication Skills	2
COM201	Computer Programming 1	3	CHM208	Physical Chemistry 2	2
COM205	Computer Programming 2	3	MTH202	Linear Algebra	2
	Sub-Total	20		Sub-Total	17
	Additional 2 Units from:			Additional 2 Units from:	
PHY203	General Physics 3	2	PHY204	General Physics 4	2
STA203	Statistics for Physics Science and Engineering 1	2	STA204	Statistics for Physical Science and Engineering 2	2
BCH209	General Biochemistry 1	2	BCH210	General Biochemistry 2	2
	Total	22		Total	19

A minimum of 35 Credit Units at 200 level

Pre-requisites: CHM201 is prerequisite for CHM206.

Level 300

Semester I			Semester II		
Code	Title	Units	Code	Title	Units
CHM 301	Physical Chemistry 2	2	CHM 318	Industrial Training (SIWES)	6
CHM 302	Inorganic Chemistry 2	3			
CHM 303	Organic Chemistry 2	3			
CHM 304	Atomic and Molecular Structure	3			
CHM 305	Petroleum Chemistry	2			
CHM 306	Theory of Molecular Spectroscopy	2			
CHM 313	Industrial Chemical Process 1	2			
CHM 314	Polymer Chemistry	2			
	Total	19			

A minimum of 34 Credit Units at 300 level

Prerequisites: CHM202 is prerequisite for CHM302.

Level 400

Semester I			Semester II		
Code	Title	Units	Code	Title	Units
CHM405	Organometallic Chemistry	3	CHM402	Research Project	6
CHM409	Polymer Technology	2	CHM414	Colour Chemistry and Technology	3
CHM411	Industrial Chemical Process 2	2	CHM308	Analytical Chemistry 2	2
CHM 413	Organic Synthesis	2			
CHM307	Carbohydrate Chemistry	1	CHM310	Applied Spectroscopy	2
CHM309	Heterocyclic Chemistry	2		Sub-Total	13
CHM311	Applied Surface and Colloid Chemistry	2		Additional 2 Units from:	2
	Sub-Total	14	CHM404	Reaction Kinetics	2
	Additional 5 units from:		CHM406	Physical Organic Chemistry	2
CHM415	Chem. of Lathanides and Actininides	1	CHM408	Natural Product chemistry	2
CHM417	Electrochemistry	2	CHM410	Nuclear and Radiation Chemistry	2
CHM419	Photochemistry and Pericyclic Reactions	2	CHM412	Co-ordination Chemistry	3
CHM315	Environmental Chemistry	3	CHM316	Separation Methods & Analysis	2
CHM317	Industrial Raw Materials Resource Inventory	1	CHM320	Industrial Chemical Technology	3
	Total	19		Total	15

A minimum of 30 Credit Units at 400 level

Prerequisites: CHM309 is prerequisite for CHM405.

20.0 MODULE LIST AND DESCRIPTIONS

Level 100

CHM 101: General Chemistry 1 (3 Units)

Atoms, molecules and chemical reactions; Modern electronic theory of atoms. Electronic configuration, periodicity and building up of the periodic table. Hybridization and shapes of simple molecules. Valence Forces; Structure of solids. Chemical equations and stoichiometry; Chemical bonding and intermolecular forces, kinetic theory of matter. Elementary thermochemistry; rates of reaction, equilibrium and thermodynamics. Acids, bases and salts. Properties of gases. Redox reactions and introduction to electrochemistry. Radioactivity.

CHM 102: General Chemistry 2 (3 Units)

Historical survey of the development and importance of Organic Chemistry; Fullerenes as fourth allotrope of carbon, uses as nanotubes, nanostructures, nanochemistry. Electronic theory in organic chemistry. Isolation and purification of organic compounds. Determination of structures of organic compounds including qualitative and quantitative analysis in organic chemistry. Nomenclature and functional group classes of organic compounds. Introductory reaction mechanism and kinetics. Stereochemistry. The chemistry of alkanes, alkenes, alkynes, alcohols, ethers, amines, alkyl halides, nitriles, aldehydes, ketones, carboxylic acids and derivatives. The chemistry of selected metals and non-metals. Comparative chemistry of group IA, IIA, and IVA elements. Introduction to transition metal chemistry.

Level 200

CHM 201: Organic Chemistry 1 (3 Credits)

Chemistry of aromatic compounds. Structures of simple sugars, starch and cellulose, peptides and proteins. Chemistry of bifunctional compounds. Energetics, kinetics and the investigation of reaction mechanisms. Mechanisms of substitution, elimination, addition and rearrangement reactions. Stereochemistry. Examples of various named organic reactions e.g. Grignard reaction, Aldol and related reactions. Simple alicyclic carbon compounds and their synthesis.

CHM 202: Inorganic Chemistry 1 (3 Credits)

Pre-requisite -CHM 102

Chemistry of First row transition metals. Introduction to co-ordination chemistry including elementary treatment of crystal field theory. Comparative Chemistry of the following elements: (a) Ga, In, Tl, (b) Ge, Sn, Pb, (c) As, Sb, Bi (d) Se, Te, Po.

Elementary introduction to Organometallic Chemistry. Role of metals in biochemical Systems. Concepts of hard and soft acids and bases. Oxidation and reduction reactions.

CHM 203: Analytical Chemistry 1 (2 Units)

Pre-requisite -CHM 101 and 102

Theory of Errors; and statistical treatment of data: Theory of sampling. Chemical methods of analysis including volumetric, gravimetric and physiochemical methods, Optical methods of analysis; separation methods.

CHM 204: Structure and Bonding (2 Units)

Pre-requisite -CHM 101 and 102

Idea of quantum states, orbitals, shape; and energy. Simple valence theory, electron repulsion theory, atomic spectra. Symmetry, molecular geometry and structure. Methods of determining molecular shape, bond lengths and angles. The structure and chemistry of some representative main group element compounds.

CHM 208: Physical Chemistry 1 [2 Units]

Pre-requisite -CHM 101

Kinetic theory of gases; science of real gases; The laws of thermodynamics; Entropy and free energy; Reactions and Phase equilibria; Reaction rates; Rate laws; mechanism and theories of elementary processes; photochemical reactions; Basic electrochemistry.

Level 300

CHM 301: Physical Chemistry 2 (2 Units)

Pre-requisite -CHM 210

A review of Gibbs Function. Chemical thermodynamics. Introduction to statistical thermodynamics. Ideal solutions. Non-Ideal solutions. Properties of electrolytes. Colligative Properties.

CHM 302: Inorganic Chemistry 2 (3 Units)

Pre-requisite -CHM 212

The Noble gases. Hydrogen. Electronic structure and general properties and comparative study of Group IA and group IIA elements. Chemistry of Boron; Carbon and Silicon; Nitrogen and Phosphorus; Oxygen and Sulphur. The Halogens. Transition elements. Separation of metals. Co-ordination Chemistry. Ligand and Crystal field theories. Introduction to Radiochemistry. Radioactivity and the periodic table. Role of metals in living systems.

CHM 303: Organic Chemistry 2 (3 Units)

Pre-requisite-CHM 201

Aromatic and Alicyclic chemistry. Survey of representative polycyclic compounds. Heterocyclic Chemistry (3, 4, 5 and 6-membered ring of O, N, S heterocyclic compounds). Reactive intermediates-carbocations, carbanions, carbenes, nitrenes, etc. Selected rearrangement reactions, e.g. Beckmann, Baeyer-Villiger etc to illustrate various reaction mechanisms and types.

CHM 304: Atomic and Molecular Structure and Symmetry (3 Units)

Pre-requisite -CHM 214

Schroedinger equation. Helium atom, ground and excited States, Spin and Pauli Principle. Hydrogen molecule, Comparison of molecular orbital and valence bond theory, concept of resonance and configuration interaction. Coulson Fischer function. Molecular orbitals for distomic molecules. Simple pielectron theory, Huckel theory. Walsh rules. Rotational, Vibrational and Electronic Spectra. Applications for determining bond lengths and angles. Brief mention of other methods. Atomic spectra Russel Saunders Coupling, Orbital and spin angular momentum. Use of symmetry in Chemistry.

CHM 305: Petroleum chemistry (2 Unit)

Petroleum in the contemporary energy scene. Nature, classification and composition of crude petroleum and natural gases. Distribution of petroleum and natural gases resources (the global and Nigerian situations). Petroleum technology. Survey of refinery products and processes. Petrochemicals in industrial raw materials. Prospects for the petrochemical industry in Nigeria.

CHM 306: Theory of Molecular Spectroscopy (2 Units)

Pre-requisite-CHM 310, 304, 310

Quantum theory of rotation and vibration. Theory of microwave, IR, Raman, UV-Visible, and NMR spectroscopy. General introduction to electron spin resonance, Mossbauer Effect, nuclear quadruple resonance and other modern techniques.

CHM 307: Carbohydrate Chemistry (1 Unit)

Classification, structure and nomenclature of carbohydrates. Preparations and reactions. Configurations. Epimerization.

CHM 308: Analytical Chemistry 2 (2 Units)

Pre-requisite: CHM 203

Sampling and sample pre-treatment. Theory of Errors. Potentiometric and pH methods. Conductometric, electroanalytical, amperometric, colorimetric methods of analysis. Coupled methods of analysis e.g. GC-MS, LC-MS, Radio-chemical methods, Chromatography.

CHM 309: Heterocyclic Chemistry

Pre-requisite: CHM 303

The synthetic and mechanistic aspects of fused heterocyclic system, particularly, quinolones, isoquinolines, benzofurans, benzothiophenes, indoles, benzopyrlium salts, coumarins and chromones. Application of heterocyclic systems in drug synthesis.

CHM 310: Applied Spectroscopy (3 Units)

Principles and applications of UV, IR, NMR and Mass spectroscopy the determination and elucidation of structures of organic compounds. Brief mention of hyphenated systems: GC-MS, LC-MS and LC-NMR, and diagnostic use of NMR in medicine.

CHM 311: Applied Surface and Colloid Chemistry (1 Unit) (L 15: P0:T0)

Some general principles relating to surfaces. Electrical potentials. Attractive forces. Solid gas interface and solid liquid interface. Definition of colloid and history of colloid development. Types of colloids. Polymers, Proteins, Gels, Association colloids, Detergents.

CHM 313: Industrial Chemical Processes 1 (3 Units)

Production of primary intermediates and synthesis of industrial organic chemicals; Polymers, adhesives, dyes, explosives, insecticides, pesticides, herbicides, flavouring agents and pharmaceuticals. Fermentation process. Chemical processing of minerals. Metallurgy and hydrometallurgical processes. Industrial electrochemistry. Manufacture of some heavy inorganic chemicals. Cement and binding materials. Inorganic fertilizers.

CHM 314: Polymer Chemistry (3 Units)

The nature of Polymer nomenclature. Outline of sources of raw materials for polymers; Polymerisation process, condensation polymerisation in details. Solubility and solution properties of polymers. Structure and properties of polymers. Fibre forming polymers.

Polymerisation mechanisms; detailed treatment of addition polymerisation. Stereospecific polymerisation. Copolymerisation. Phase systems for polymerisation. Industrially important thermoplastic and thermosetting polymers: Polyurethanes. Rubber elasticity. Mechanical properties of polymers. Analysis and testing of polymers. Degradation of polymers.

CHM 315: Environmental Chemistry (2 Units)

Concepts of elementary cycles. Characteristics of the atmosphere. Sources, types and effects of environmental pollution. Waste water treatment. Composition of domestic/industrial wastes and waste management. Water chemistry and analysis. Chemical and Physical instrumentation in environmental Sciences. Introduction to Environmental Impact Assessment. Twelve principles of green chemistry.

CHM 316: Separation Methods and Analysis (3 Units)

Intermediate theory and laboratory techniques in analytical and physical chemistry. Advanced data analysis; methods and goodness-of-fit criteria. Spectroscopic methods and instrumentation. Separation methods: ion exchange, gas, paper, liquid and column chromatography; electrophoresis. Atomic and molecular absorption, emission and fluorescence spectrophotometry. Electroanalytical techniques. Quantitative analysis. X-ray methods. Refractometry, Interferometry, Polarimetry, Polarography & Calorimetry.

CHM 317: Industrial Raw Materials Resource Inventory (1 Unit)

Survey of Nigeria's industries and their raw material requirements. Mineral chemistry. Fossils and their uses. Plant and animal products. Nuclear, solar, aerodynamic/wind and hydrodynamic sources of energy. Potentials and applications of locally available raw materials as industrial feed stocks.

CHM 320: Industrial Chemical Technology (3 Units)

Heat transfer and Mass transfer processes. Unit operations. Chemical technology equipment. Hydrogen and carbon monoxide synthesis, gas, Oxo process, water gas, source of hydrogen and its application. Industrial organic materials. Raw materials, Technical and economic principles of processes and product routes. Flow diagrams. Selected oils and fats, soaps and detergents, sugar, varnishes, plastics, wood pulp and paper. Environmental pollution.

Level 400

CHM 401: Seminar (1 Unit)

Students reports on an assigned or chosen current topic in chemistry. Review of literature on the assigned topic should be included. Assessment to be on written report and oral presentation.

CHM 402: Research Project (6 Units)

Students are expected to choose topics with the guidance of supervisory lecturers scientific projects that will demonstrate their understanding of the fundamental principles and methodologies associated with Chemistry and industrial processes. Students will be expected to carry out literature survey on chosen topics, perform experiments and produce reports. Students will be subjected to both seminar and oral examinations on their projects.

CHM 404: Reaction Kinetics (2 Units)

Pre-requisite -CHM 301

Review of first, second and third order rate equations. Rate constants and equilibrium constants. Collision theory, transition state theory, reaction co-ordinates. Uni-molecular reaction theory, bimolecular reaction mechanisms, chain reaction mechanisms; catalysis and heterogeneous reactions. Photochemical reaction mechanisms.

CHM 405: Organometallic Chemistry (3 Units)

Classification of organometallic compounds. Preparation, structure and reactions including abnormal science of organometallic compounds. Synthetic utility of organometallics. Introduction to organometallic compounds of the transition elements. Classification of ligands, electron rule, bonding, preparation of organic transition metal compounds. Reaction and structures of organometallic compounds of transition

elements. The organic chemistry of ferrocene and related compounds. The role of organometallic compounds in some catalytic reaction.

CHM 406: Physical Organic Chemistry (2 Units)

Pre-requisite -CHM 303 and 308

Preparation and reactions of stereoisomers, Stereoselectivity; Neighbouring group effects, and a few special topics in Physical organic Chemistry. Conformational Analysis.

CHM 408: Natural Products Chemistry (2 Units)

Prerequisite-CHM 303

General methods of isolation, separation, purification and structural determination of natural products. Classifications and biogenesis. Chemistry of terpenoids, steroids, alkaloids, antibiotics, flavonoids. Prostaglandins and chlorophylls. Other natural products of pharmaceutical importance. Cholesteryl benzoate, liquid crystals and digital displays in computer screens, etc.

CHM 409: Polymer Technology (2 Units)

Pre-requisite -CHM 314

Large scale industrial processes. Polymer Technology. Polymer processing: injection; extrusion; compression and transfer moulding of thermosets; polymer compounding with additives; polymeric surface coatings and adhesives.

CHM 410: Nuclear and Radiation Chemistry (2 Units)

Pre-requisite -CHM 302

Natural radiations/radioactivity, fusion, fission, decay processes, nature of radiation. Nuclear models, science of nuclear reaction. Principles and measurement of radioactivity. Applications of radioactivity. Radiation hazards.

CHM 411: Industrial Chemical Processes 2 (2 Units)

Pre-requisite -CHM 302

Chemical processing of minerals. Metallurgy and hydrometallurgical processes. Industrial electrochemistry. Manufacture of some heavy inorganic chemicals. Cement and binding materials. Inorganic fertilizers.

CHM 412: Co-Ordination Chemistry (3 Units)

Pre-requisite -CHM 302

Definition, recognition and applications of co-ordination compounds. Nomenclature, Co-ordination formula and Isomerism in complexes. Stereochemistry of complex molecules; Theories of structure and bonding. Physical methods of structural investigation. Magnetic properties. Absorption and Vibrational spectra. The spectrochemical series. The Nephelauxetic series and the John-Teller distortions. Stabilisation of unusual oxidation states by complex formation. Thermodynamic

stability of complex compounds, the stability constant, the chelate effect. Preparation and reactions of complexes. Kinetics and Mechanisms.

CHM 413: Organic Synthesis (2 Units)

Pre-requisite -CHM 303

Reduction methods. Catalytic hydrogenation. Reduction with boron and aluminium hydrides and their analogues and derivatives. Metal reductions. Selective reduction in polyfunctional compounds. Oxidation methods. Epoxidation, hydration and hydroxylation of alkenes; oxidative cleavage of glycols. Survey of synthetic applications of organometallic compounds. Hydroboration oxidation to ketones. Carboxylation reactions and protonolysis; phosphorus halides and their applications. Enamines: synthesis and applications. Formation of polycyclic compounds. Aldol type reactions and reaction of iminium salts with nucleophiles. Synthesis of complex molecules. Pericyclic reactions. Methodology for the construction of synthetic routes (disconnection approach) and applications for the synthesis of important and complex organic compounds. Molecular self-assembly in synthesis.

CHM 414: Colour Chemistry and Technology (3 Units)

Colour and constitution. Chemistry, properties of dyes and pigments. Classification of dyes and fibres. Dyeing mechanisms. Preparation and dyeing of natural and synthetic fibres. Colour fastness properties. Quality control procedures and the colouration industry. Paints, Inks, Classification, Preparation and uses.

The chemistry and theory of dyeing. Chemistry and application of reactive dyes. Preparation and dyeing of man-made fibres. Dyeing machineries. Printing. Colouring matters for food, drugs and cosmetics. Dyes used in paper industry and colour photography.

CHM 415: Chemistry of Lanthanides and Actinides (1 Unit)

Pre-requisite-CHM 302

The elements and position of the two series in the periodic table. Comparison of the two series. Lanthanides contractions. The electronic configuration and their sequences on oxidation states, size relationship, magnetic properties and colour. Chemical properties and structure of the elements and their compounds. Recovery and separation of the elements. Uses of Lanthanides and Actinides.

CHM 417: Electrochemistry (2 Units)

Pre-requisite -CHM 301

Electrical double layer, potential at zero charge, polarizable and non-polarizable interface, mass transport, concentration polarization, Fick's Laws, Levic equation. Electrode reactions. Polarography. Corrosion – types and prevention.

21.0 LIST OF STAFF MEMBERS IN THE DEPARTMENT

S/No.:	Names	Status	Rank	Remarks
Academic Staff				
1.	Dr. (Mrs.) Esther U. Ikhuoria	P/T	Professor	
2.	Dr. Stephen S. Ochigbo	F/T	Assoc. Professor	
3.	Dr. John O. Jacob	P/T	Snr. Lecturer	
4.	Dr. (Mrs.) Habibat F. Chahul	F/T	„	
5	Dr. Paul Elaoyi David	P/T	„	
6.	Dr. Hamza Abba	P/T	„	
7.	Dr. Mohammed L. Musa	F/T	Lect. I	
8.	Dr. Jibrin Noah	F/T	Lect. II	
9.	Mr. Greatman Okafor	F/T	„	
10.	Muhammad Zanna	F/T	Graduate Assistant	
Technical Staff				
1.	Mrs. Ovurevu Dorcas	F/T	Technologist	Maternity Leave
2.	Mr. Usman Dakyes	F/T	Technician	
Administrative Staff				
1.	Ms. Clare Irozuoke	F/T	Departmental Officer	