National Open University of Nigeria

Policy Title	Policy on Course Design and Development
Policy No:	NQSA/POL/TEL/006
Owner:	National Open University of Nigeria (NOUN)
Approved By:	The University Senate
Manager/Driver:	NOUN Press: CMDU
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1.0   Introduction

The National Open University of Nigeria is an Open and Distance Learning institution that is committed to broadening access to quality education through the design and development of various programmes that give knowledge to all who desire to enhance their social and economic empowerment.

The Course Material Development Unit (CMDU) is the professional unit where all the National Open University of Nigeria's course materials are processed and published. The unit was envisioned at the beginning of the university to have a Directorate for Instructional Material Development and Production. It was designed to handle Instrutional Design, Course Writing, and Material Production (Federal Ministry of Education, 2002).

Course Materials play vital role in every ODL institution and NOUN is not an exception. NOUN Course Materials have far-

reaching impact on learners and the public. They provide the core information that learners will experience, learn, and apply during a course. The power to either engage or demotivate students is in these resources. This is the major reason much emphasis is placed on instructional design and course development in NOUN. Therefore, the course materials must be well organized, the right words must be chosen for stating objectives and the language must be conversational, informal, using such techniques as repetitions, activities, and exercises to enhance teaching and learning. Content must be broken into manageable chunks while the intended learning outcomes of the course must be clearly presented for learners.

CMDU is poised to build on the existing human and material resources to provide contextually relevant resources in diverse formats. The increased availability of quality teaching-learning materials online and in print, has paved the way for our learners, lecturers, as well as the public to gain access to a wide variety of contextually relevant course materials in alternative formats: print, web, Braille, etc. Therefore, course materials may include lectures, lecture notes and materials, syllabi, study guides, bibliographies, visual aids, images, diagrams, multimedia presentations, web-ready content - be it printed, Braille, digital, Internet-based, audio-based or video-based, module, or otherwise.

Thus, the Course Materials Development Unit (CMDU) serves as the 'contact point' between the faculties/departments, editors and printers/publishers. The

unit collaborates with the faculties/departments to develop and write the course materials. It receives written course materials in soft and hard copies formally from departments, documents, and sets in motion the editing process - content, language, and formatting. After the completion of the editing process, the unit forwards materials to the NOUN Printing Press for it to initiate the printing process, and to DICT/DLCMS for web upload.

In addition to the above, the unit is also responsible for updating records of status of course materials for record keeping and information purposes. Looking at the responsibilities it is saddled with, it is obvious that CMDU is at the centre of operations of the National Open University of Nigeria (NOUN).

NOUN Vision Statement
To be regarded as the foremost university providing highly accessible and enhanced quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers.

NOUN Mission Statement
To provide functional, cost effective, flexible learning which adds lifelong value to quality education for all who seek knowledge.

2.0   Purpose

The purpose of this policy is to provide direction in the Design and Development of **Self-Instructional Materials** (hereinafter referred to as **Course Materials**) to support quality teaching and learning for **all academic programmes** in the National Open University of Nigeria. In doing so, the policy seeks to strengthen commitment to interactivity, simplicity, and comprehension in the development of **Course Materials** for the users.

3.0   Scope

This policy shall apply to all course materials produced by the National Open University of Nigeria.

4.0   Definitions

4.1   Programme:

This refers to a set of courses that a student will take to earn a degree. A programme is made up of courses and each attributes a unit value. An award is earned at the successful completion of the required courses in an academic programme. For example, a Bachelor's degree in Chemistry is a programme that consists of several courses such as Introductory Inorganic Chemistry, Introductory Organic Chemistry, Environmental Chemistry, and so on.

4.2   Course:

This refers to a unit of teaching that lasts for one semester in an academic year. It must be derived from the programme objectives. A course is broken down into modules and units.

4.3 Course Code:

This is a unique identifier attached to a course. Codes are used to organise courses within a programme. The codes are assigned by using convention of:

a. Two (2) to three (3) letters and three (3) Arabic numbers.

b. The letters indicate the programme managing the course. E.g. CHM102. CHM represents Chemistry as a programme. The first number on the Arabic number indicates the level the course will be taken, the middle number indicates the course number in the programme, and the last Arabic number indicates a combination of a number and the semester. For example, CHM102:

CHM - Chemistry programme
1   - 100 Level
0   - The course number in the programme
2   - Second Semester and the completion of the course number making the course number to be 02.

What this means is that the course will be offered by the learners in 100 level and in second semester.

c. Since the last Arabic number in a course code indicates the semester, odd numbers are used to indicate first semester and even numbers are used to indicate second semester when generating course codes.

4.4   Course Title:

This is a brief description of a unit of teaching or subject matter to be covered in a course. It must:

a.   provide glimpse of what the course is about;
b.   be catchy to motivate learning;
c.   not be too long but should be clear, unique and keyword savvy;
d.   reflect the content of the course.
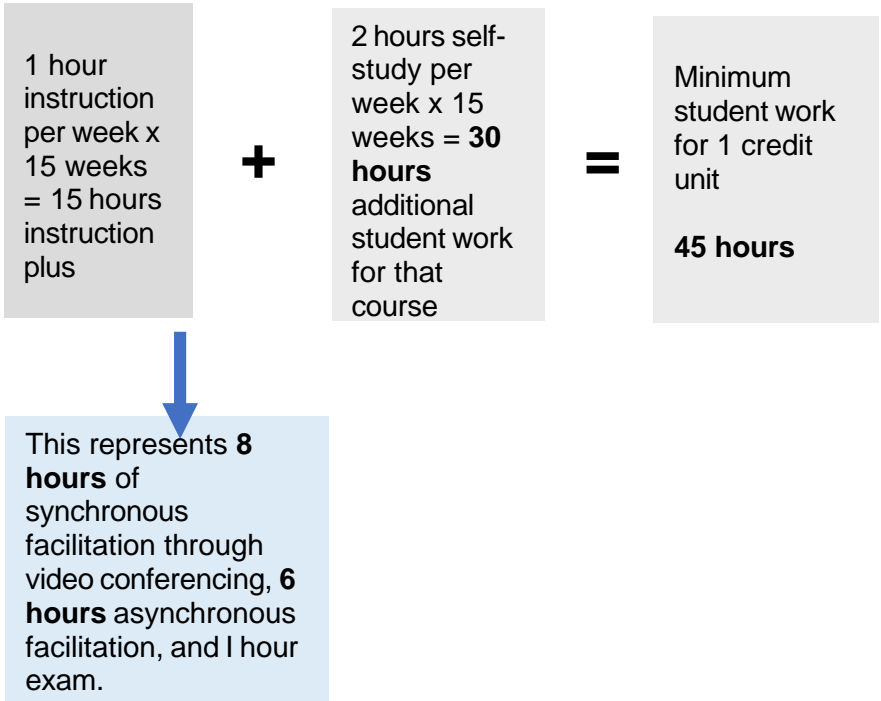
4.5   Credit Unit:

This is used to quantify the amount of academic work required to earn a degree. It is determined as the number of hours a learner is expected to spend on the average to achieve specific learning outcomes through relevant assessment(s),
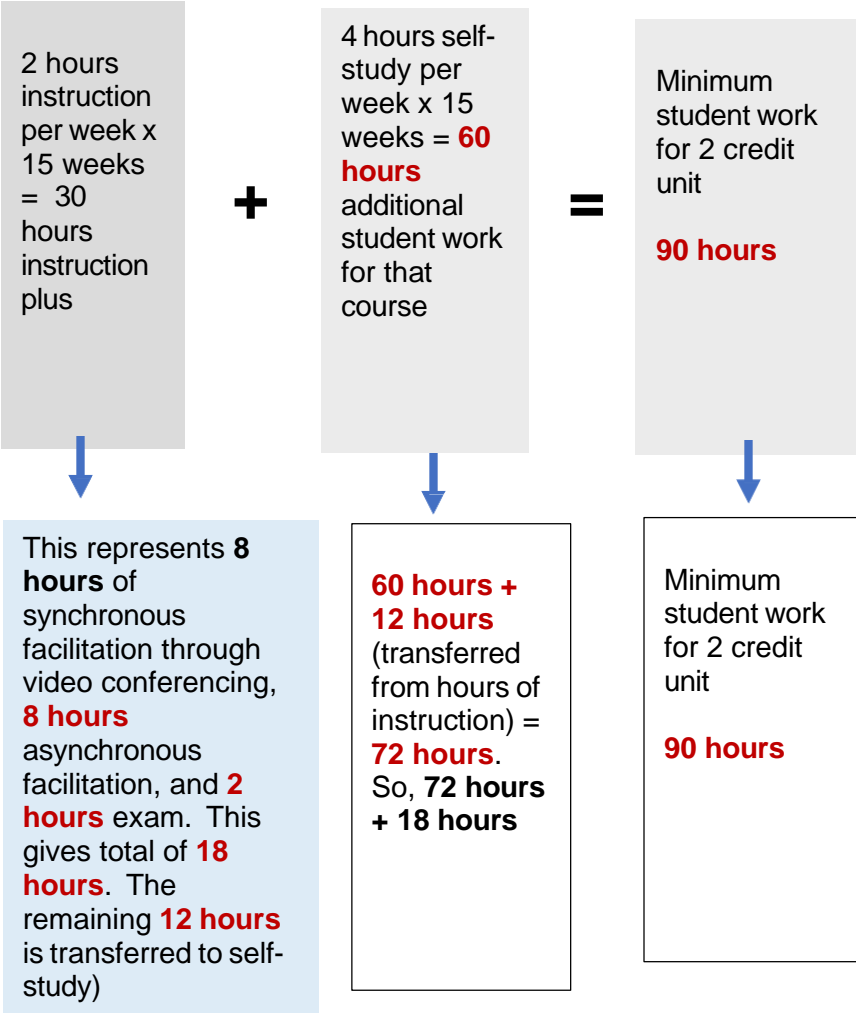
Academic learning time includes:

- **Directed learning:** Direct contact with teachers and trainers. Examples are facilitators, participating in course discussion forums, seminars, laboratory practical, workshops, fieldwork, taking course quizzes and examinations, and so on.

- **elf-Directed**: Time spent doing private self-study. Examples are reading the course materials, watching instructional and pre-recorded videos, doing self-assessment exercises, doing assignments, undertaking practical tasks, working on course feedbacks, searching the internet, private group study (tutorials),

Courses are assigned a number of credit hours to indicate the estimated average workload in each course. Typically, a student takes 15 credit units per semester.
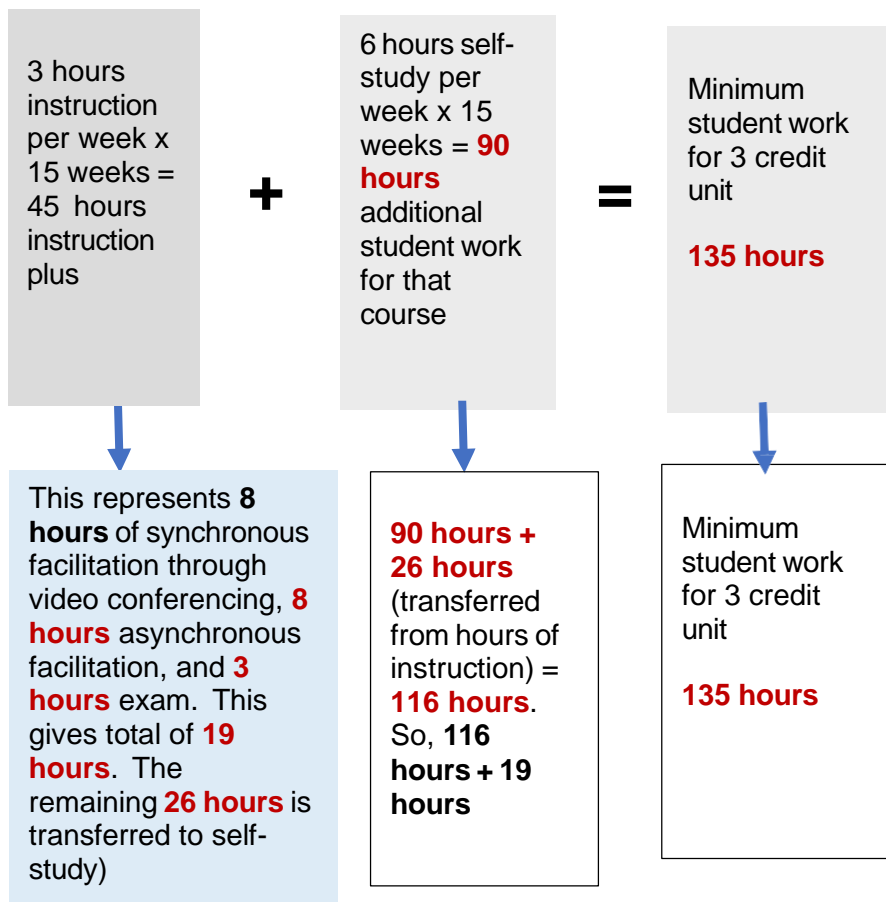A credit unit is calculated thus:

1 hour instruction per week x 15 weeks = 15 hours instruction plus	**+**	2 hours self-study per week x 15 weeks = **30 hours** additional student work for that course	**=**	Minimum student work for 1 credit unit **45 hours**

This represents **8 hours** of synchronous facilitation through video conferencing, **6 hours** asynchronous facilitation, and I hour exam.

In NOUN, from a course of two credit units, the total hours for both synchronous and asynchronous facilitation remain **constant**. More time is given to self-study. The total number of hours that instruction per week would have gained is transferred to the hours of self-study. Below are examples for 2 and 3 credit unit courses.

2 hours instruction per week x 15 weeks = 30 hours instruction plus

+

4 hours self-study per week x 15 weeks = **60 hours** additional student work for that course

=

Minimum student work for 2 credit unit

90 hours

This represents **8 hours** of synchronous facilitation through video conferencing, **8 hours** asynchronous facilitation, and **2 hours** exam. This gives total of **18 hours**. The remaining **12 hours** is transferred to self-study)

60 hours + 12 hours (transferred from hours of instruction) = **72 hours**. So, **72 hours + 18 hours**

Minimum student work for 2 credit unit

90 hours

For a 3 credit unit course, it would appear thus:

3 hours instruction per week x 15 weeks = 45 hours instruction plus	**+**	6 hours self-study per week x 15 weeks = **90 hours** additional student work for that course	**=**	Minimum student work for 3 credit unit **135 hours**

This represents **8 hours** of synchronous facilitation through video conferencing, **8 hours** asynchronous facilitation, and **3 hours** exam. This gives total of **19 hours**. The remaining **26 hours** is transferred to self-study)	**90 hours + 26 hours** (transferred from hours of instruction) = **116 hours**. So, **116 hours + 19 hours**	Minimum student work for 3 credit unit **135 hours**

4.6 **Course Status:**
This indicates if the course is a compulsory (core) course or an elective or required course.

4.7 **Practical Hour:**
This is the number of hours a learner is expected to spend on the average to achieve specified learning outcomes through demonstration. There are two forms of practical – indoor and field practical training. The field practical is an important arena for learning which emphasises the

connections between theory and practice. An example of indoor practical is laboratory practical while examples of field practicals are internship, SIWES, farm practical, etc.

One laboratory credit hour represents 1 hour per week contact with the facilitator with 1 hour per week of scheduled or independent laboratory work, and 2 hours of the learner preparation time. This means for 1 credit laboratory work, you have:

Contact hour	-	1 hour x 15 weeks = 15 hours per semester
Scheduled or Independent Work	-	1 hour x 15 weeks = 15 hours per semester
Learner's Preparation Time	-	2 hours x 15 weeks = 30 hours per semester
Total hours for a credit laboratory course	-	60 hours per semester

If the laboratory work is 4 credit units, it would appear thus:

Contact hour	- 4 hours x 15 weeks = 60 hours per semester
Scheduled or Independent Work	- 4 hours x 15 weeks = 60 hours per semester
Learner's Preparation Time	- 8 hours x 15 weeks = 120 hours per semester
Total hours for a credit laboratory course	- 240 hours per semester

The hours for field practical are determined by the industry or organisation where the learner is to practice with a minimum of 8 hours per day which is the approved national working hours per day. However, the university and accrediting bodies determine the duration of practice. For example, for internship and SIWES, it is 6 months but can be spread.

4.8 Contact Hour:
This means hours of learners' direct contact with the facilitators.

4.9 Core Course:
This means compulsory course. A learner must take and pass a compulsory course to earn a degree.

4.10 Elective Course:
This is a course a learner may register to complete the number of required credits to earn a degree. A learner can earn a degree even when he/she does not pass an elective course but must meet the required number of credits for graduation. The selection of an elective course is determined by the learner's interest in the course.

4.11 Required Course:
This refers to a course that provides a broad foundation for learners' learning and that would help meet specified learning outcome(s). Though it is not compulsory, a learner must register for the course to meet specific learning outcome(s) but would not deprive the learner from earning a decree if he/she did not pass the course.

4.12 Level of Study:
This means the learner's year of study in an academic programme. For example, in a Chemistry programme, a learner may be at Level 100. Years of study are classified according to programmes. Most undergraduate programmes are 4-year maximum to earn a degree, but some have 6-year of study. Therefore, in classifying the year of study for undergraduate programmes, you have:

a. Level 100 - Year 1
b. Level 200 - Year 2
c. Level 300 - Year 3
d. Level 400 - Year 4
e. Level 500 - Year 5
f. Level 600 - Year 6

Six (6) years is the maximum for undergraduate programmes in the university while 4 years is the minimum. Therefore, the post-graduate programmes such as Post-Graduate Diplomas (PGDs), Masters' and Doctoral Degrees are classified thus:

a.	Post Graduate Diplomas	-	Levels 700
b.	Master Programmes	-	Levels 800
c.	Doctoral Programmes	-	Levels 900

4.13 **Programme Objectives:**
These are specific statements of programme intention. What does the programme want to achieve? Why should learners enrol in the programme? What gap(s) would the programme be filling in the society, industries, and economic growth? Is the programme within the institution's core values? These are questions that are often considered when stating programme objectives.

4.14 **Course Learning Outcomes:**
These are clear and measurable statements of what the learners will be able to do after they have completed units of learning in a course. Learners' performances are tested against the stated learning outcomes.

4.15 Competencies:
These refer to the skills, knowledge, and abilities a learner would require in performing a task that would help him/her achieve the stated learning outcomes. The singular of competencies is competency. Competency is different from competence. Competence is the basic ability to do something successfully or efficiently. Competency is more advanced.

4.16 Prior Knowledge:
This refers to the information and skills a learner has already acquired before entering a new educational endeavour or learning experience. It serves as a foundation for a new knowledge to build on. Prior knowledge could also be referred to as prior learning.

4.17 Pedagogy

This is the science of teaching and learning that helps coordinate learning activities towards achieving desirable learning outcomes.

4.18 Formative Assessment:

This assessment is used to collect detailed progressive learning information from learners to improve their learning. These include self-assessment exercises, Tutor Marked Assignments (TMAs), quiz, contributions in discussion forums, in-class activities, practical tests.

4.19 Summative Assessment:

This is an assessment that is used to evaluate learners' learning at the end of a specific instructional period. Summative assessment is designed to determine the extent learners have mastered what they have been taught. They help to determine learning progress and achievements. Examples of summative assessment are final examinations, standardised tests, performance-based assessments, portfolios, and projects.

4.20 Interactivity:

This refers to the degree to which learners can engage with the content and the learning environment. In distance learning, interactivity promotes learners' engagement, motivation, and the level to which they can achieve the learning outcomes. Interactivity is built into the learning materials through quizzes, simulations, games, gamification, discussion forums, instructional videos, storytelling, life application examples and problem solving, case studies and scenarios, and life sharing experiences of achievers in different professions and sectors of the economy.

4.21 Course Module:
A course module is a self-contained unit of instruction that is part of a larger course. It is designed to teach a set of related topics and can be used to break down a course into a more manageable part to form units in a course material/learning material. A module is used to represent a broad theme of knowledge in a course. Course modules are derived from the course objectives. Where required, a module can serve as stand alone for a short course such as micro credential, and where an individual has accumulated all the related modules, it could be counted as a course.

4.22 Learning Unit:
Learning unit is a self-contained unit of instruction that is a part of a module. It is designed to teach a specific topic or a set of related topics. Learning units are derived from a course module objectives. A set of learning units must be related to a specific module.

4.23 Design and Development Team:
These are individuals from different areas of specialisation required to design and develop a programme or a course. They include the Subject Matter Experts (SMEs), Instructional Designers, Learning Technologists, Learners, Personnel from related industries/professionals, and Graphic Designers.

4.24 Subject Matter Experts (SMEs):
These are classified academics in their areas of specialisation in line with their field of study.

4.25 Employability Skills:
These are the skills a learner needs to be able to demonstrate the knowledge gained in school after graduation. There are two categories of employability skills – general employability skills and professional or specific

employability skills. The general employability skills which include communication skills, problem solving skills, creative and innovative skills, and programme or discipline specific skills.

4.26 Semester:

A half-year term in the academic year of the university. NOUN shall run two semesters currently in an academic year and shall be classified as underscore 1 and 2. E.g. 2023_1 and 2023_2. A semester shall last for 16 weeks.

4.27 Learning Activities:

These are instructional measures/actions that are designed to help learners learn and achieve specific learning outcomes. These include facilitations, discussions, assignments, quizzes, readings, group work, practical exercises, simulations, case studies, and games.

4.28 Learning Resources:

These are materials that are designed to help learners learn and achieve specific learning outcomes. Examples are course materials, instructional videos, podcasts, digital textbooks, online resources (textbooks, journals, videos, etc), and Educational Apps/software.

4.29 Learning Environment:

This refers to the various physical and virtual locations, contexts, and culture where the learners learn. This includes the university culture, philosophy, characteristics, and how the staff and students interact with and treat one another.

4.30 Course Table of Specification (CTOS):

Course table of specification is different from the test item table of specification though both serve the same purpose of ensuring adequate coverage of activities in an instruction.

CTOS is the last stage in course design which is given to writers for content development. It maps prior knowledge, learning activities, learning resources, pedagogy, formative assessment, and estimated study time with a unit title in a course.

4.31 Adoption:

This means adopting an existing course material, that is, using the course material as it is in its present condition, with appropriate permission from the mother institution or owner.

4.32 Adaptation:

This means adapting an existing material ,that is, having permission from the owner to change content or contextualise the content within an agreed percentage of change.

Rowntree (1990) identified five levels of adaptation as:
- badging – simply changing the logo
- adding study guidance
- adding local example
- adding new content
- adding new media

In addition to Rowntree submission, it could also be by:
- Removing from the existing content.

4.33 Writing from the Scratch

This refers to a process where a university or an institution uses its academics to design and develop its course materials to meet its specific needs.

4.34 Instructional Design

Instructional design is the systematic development of instructional specification using learning and instructional theory to ensure the quality of instruction. It is the entire process of analysis of learning needs and goals and the development of instructional materials and activities; and layout and evaluation of all instruction and learner activities" (COL, 2005:3). Romiszowki (1981) described it as a goal-directed teaching process that is more or less pre-planned.

4.35 Instructional Designer

This refers to an individual who specialises in enhancing learners' learning experiences with the application of educational and learning theories towards achieving defined learning outcomes. An instructional designer's responsibility includes leading the development of specific instructional products/contents/materials.

4.36 Learning Technologists

This refers to individuals who specialise in using technology to implement learning products/contents. They support faculty to become proficient with technology and integrate technology into their teaching.

4.37 Delivery Mode

This refers to the method of delivering the instructional content to the learners. NOUN uses hybrid such that:
- online is used for course facilitation (remote course facilitation);
- learners are allowed the option to take their examinations remotely or in-person;
- the practical courses are delivered through the combination of in-person and remotely; and

- SIWES, Internship, teaching practice, and practicum are mostly done in-person, but the university allows remote technique where possible.

4.38   Outline Programme Proposal (OPP)
In NOUN, this refers to the highlight of programme structure which includes:
- Programme name and code,
- Programme justification, philosophy History, Philosophy, Aim, and Outcomes of the Programme
- The target audience
- Basic Admission Requirements
- Graduation Requirements
- Assessment and evaluation
- Resource requirement
- Delivery mode
- Learner's support
- Language of instruction
- Projection of student enrolment

4.39   Detailed Programme Proposal (DPP)
In NOUN, this refers to programme structure, course description, and course design.

4.40   Programme Structure
This refers to the listing of courses by level, course code, course title, semester, credit unit, status, lecture hour, and practical hour.

4.41   Course Description
This refers to course introduction, course learning outcomes, breakdown of course modules, units, and topics within the units in a course.

4.42 Course Design

This refers to the alignment of unit learning outcomes with prior knowledge, learning activities, learning resources, pedagogy, formative assessment, and estimated study time. This is presented as Course Table of Specification.

4. 43 House Style

This refers to the institutional style of presenting instructional content at both print and virtual mode. This includes presentation style of the headings, page settings, font type and size, colour usage, navigation techniques, ordering of learning devices etc.

5.0   Principles

5.1   In NOUN, every course is unique.

5.2   NOUN recognises the diversity in the learning needs of learners.

5.3   NOUN uses team approach in its course material development.

5.4   In NOUN, course contents are deployed in print and digital formats.

5.5   Learning outcomes direct the content structure of course materials in NOUN.

5.6   NOUN has a robust Learning Management System where students learn.

5.7   NOUN course materials are self-driven.

6.0   Policy Statements

6.1   NOUN course materials shall have a lifespan of five (5) years from the date of publication.

6.2   A review of course materials will be carried out after five (5) years or before five (5) years, if requested by the department, with the approval of the University Senate.

6.3   Team approach and learner centred techniques shall be used in the course design and development.

6.4   Subject Matter Experts (SMEs) and industrial personnel are to be used in their areas of specialisation.

6.5   A minimum of two SMEs shall co-write or co-author a course material.

6.6   Technology will be used to drive interactivity in a course.

6.7   Where possible, adoption or adaptation of Open Educational Resources (OER) may be used. But the content adopted or adapted must align with the analysis in the Table of Specification.

7.0   Policy Implementation

7.1   Department nominates Subject Matter Experts (SMEs) and industrial personnel where required, and presents the list to CMDU.

7.2   CMDU should set up course design and development team that would include the SMEs nominated by the department(s) and the industrial personnel, Instructional Designers, Graphic Artist, and Learning Technologists.

7.3   CMDU should present the list of the team members, cost implication, activities and timelines for the course design and development to the Vice-Chancellor for approval before commencement of the work.

7.4   CMDU is to present the approved outsourced persons to the Registrar to issue them with engagement letters detailing the activities they are to carry out and the timelines.

7.5   CMDU is to ensure that the money required for the project is ready before the commencement.

7.6   CMDU appoints a senior Instructional Designer to coordinate the team.

7.7   The team reviews the Table of Specification in the OPP and DPP to ensure adequate coverage and relevance.

7.8   CMDU assigns courses to the SMEs according to their areas of specialisation as presented by the department. The SMEs are to write the content, prepare the instructional

videos, and serve as content editors. The industrial personnel can also be used to prepare the instructional videos.

7.9   The course writers, content editors, instructional designer(s), learning technologist(s) should work simultaneously to produce a complete course.

7.10   Once the instructional designer certifies the course as okay, the content should go to the copy editors who will ensure grammatical correctness and be presented in the house style. Then, the Learning Technologists will ensure adequate setting of the virtual learning environment and presentation.

7.11   Both the print and the course page in the LMS are presented for beta test. Learners should be part of those that will evaluate the materials during the beta test.

7.12   The course writers and others are to receive their payment after the beta test.

8.0   Sanctions on Violating this Policy

8.1   Any staff that violates this policy may receive written warning, denial of three months' salaries, suspension from duty that may last one year, being relieved of administrative position as may be decided by the University Management.

8.2   Any writer whose course is not certified okay by the instructional designer will not be paid. The Registrar should ensure that this reflects in the letter of engagement.

9.0   Policy Alignment

This policy aligns with the following documents:

9.1   Federal Ministry of Education (2002). Blueprint and Implementation Plan for the National Open & Distance Learning Programmes.

9.2   National Open University of Nigeria: National Open University (No. 6, 1983) CAP N63.

9.3   National Open University of Nigeria: National Open University (Amendment Act, No. 19, 2018).

9.4   NOUN Policy on Programme Design and Development.

10.0 Team of Developers

1.   Prof. Olubiyi A. Adewale
2.   Prof. Obhajajie Juliet Inegbedion
3.   Miss Nora Onwumelu