

## AL-HIKMAH UNIVERSITY, ILORIN FACULTY NATURAL AND APPLIED SCIENCES DEPARTMENT OF COMPUTER SCIENCE BSc. SOFTWARE ENGINEERING PROGRAMME 2019/2020 ACADEMIC SESSION COURSE OUTLINE FOR:

**COURSE CODE: SEN 204** 

COURSE TITLE: LOGIC AND ITS APPLICATIONS IN COMPUTER SCIENCE

**COURSE CREDIT: 2 units.** 

LECTURE HOURS (Thursdays 4:00Pm -6:00PM).

## STUDENTS SHOULD NOTE THAT EACH LECTURE PERIOD SHALL FEATURE A 10-15 MINUTES OF PRE-LECTURE OR POST-LECTURE CAT (Continuous Assessment Test)

| (Continuous Assessment Test) |            |  |                   |
|------------------------------|------------|--|-------------------|
| LECTURE                      | DATE       | TOPIC                                    | COURSE            |
| PERIOD                       |            |  | LECTURER          |
| 1                            | 19-3-2020  | General Introduction to concepts in      | Mr. A.M. Oyelakin |
|                              |            | Logic                                    |                   |
| 2                            | 26-3-2020  | Propositional Statements, Truth Table,   | Mr. A.M. Oyelakin |
|                              |            | Propositional connectives, Laws, and     |                   |
|                              |            | Tautologies                              |                   |
| 3                            | 02-04-2020 | Handling and Interpreting Valid and      | Mr. A.M. Oyelakin |
|                              |            | Invalid Arguments                        |                   |
| 4                            | 09-04-2020 | Introduction to Formal Deduction in      | Mr. A.M. Oyelakin |
|                              |            | Computer Science                         |                   |
| 5                            | 16-04-2020 | Role of Formal Deduction in establishing | Mr. A.M. Oyelakin |
|                              |            | argument validity                        |                   |
| 6                            | 23-04-2020 | Theorem Proofing with several relevant   | Mr. A.M. Oyelakin |
|                              |            | examples                                 |                   |
| 7                            | 30-04-2020 | First CAT and Revision                   | Mr. A.M. Oyelakin |
| 8                            | 07-05-2020 | Propositional Logic and Circuit          | Mr. A.M. Oyelakin |
|                              |            | Minimization                             |                   |
| 9                            | 14-05-2020 | Introduction Prolog as a declarative     | Mr. A.M. Oyelakin |
|                              |            | Programming Language                     |                   |
| 10                           | 21-04-2020 | Practical-based demonstration on Prolog  | Mr. A.M. Oyelakin |
|                              |            | Programming Environments                 |                   |
| 11                           | 28-05-2020 | Application areas of Logic in Artificial | Mr. A.M. Oyelakin |
|                              |            | Intelligence, Theorem Proofing and       |                   |
|                              |            | Expert Systems                           |                   |
| 12                           | 05-06-2020 | Revision and Second CAT                  | Mr. A.M. Oyelakin |