

برياجامعة الحكمة، إلورن،

AL-HIKMAH UNIVERSITY, ILORIN, NIGERIA www.alhikmahuniversity.edu.ng ....a tradition of learning for wisdom and morality

## FACULTY OF NATURAL AND APPLIED SIENCES DEPARTMENT OF COMPUTER SCIENCE BSc Cyber Security 2023/2024 Session COURSE OUTLINE

COURSE CODE: CYB 309 COURSE TITLE: SYSTEMS SECURITY CREDIT UNITS: 2 LECTURE DAY(S): Fridays: 8am – 10am

| LECTURE<br>PERIOD | TOPIC  | COURSE<br>LECTURER(S) |
|-------------------|--|-----------------------|
| Week 1            | Introduction to System Security<br>✓ System<br>✓ Safety<br>✓ Security  | R.D. AZEEZ            |
| Week 2            | Overview of system security principles<br>✓ Confidentiality<br>✓ Integrity<br>✓ Availability<br>Threat Modeling          | R.D. AZEEZ            |
| Week 3            | Risk Assessment<br>Access Control Models<br>and Mechanisms   | R.D. AZEEZ            |
| Week 4            | The Three (3) As (AAA)<br>Authentication Methods<br>Protocols<br>Implementation of access control and policies           | R.D. AZEEZ            |
| Week 5            | Security Threats<br>✓ Program Threats<br>✓ System and Network Threats<br>✓ Cryptography                                  | R.D. AZEEZ            |
| Week 6            | Cryptography for System Security<br>✓ Basics of cryptographic Algorithms<br>✓ Encryption, Decryption, and Key Management | R.D. AZEEZ            |
| Week 7            | Continuous Assessment  |                       |
| Week 8            | Network Security<br>✓ Network threats and countermeasures<br>✓ SS/TLS  | R.D. AZEEZ            |

|         | Configuring secure networks   |            |
|---------|---|------------|
| Week 9  | <ul> <li>Security Policies and Incident Response</li> <li>✓ Security Development</li> <li>✓ Incident response planning</li> <li>✓ Incident response execution</li> <li>Secure SDLC</li> </ul> | R.D. AZEEZ |
| Week 10 | Secure Coding practices<br>✓ Blockchain Technology<br>✓ IoT Security  | R.D. AZEEZ |
| Week 11 | Continuous Assessment   |            |
| Week 12 | Revision  |            |
| Week 13 | Revision  |            |
| Week 14 | Examination Period  |            |
| Week 15 | Examination Period  |            |