MICHAEL AND CECILIA IBRU UNIVERSITY

AGBARHA-OTOR

DELTA STATE, NIGERIA

FACULTY OF NATURAL AND APPLIED SCIENCES

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

COURSE TITLE: **SYSTEM ANALYSIS AND DESIGN**

COURSE CODE: **CSC 310**

CREDIT UNIT: 3

CURRENT SESSION: 2017/2018

LEVEL: 200

SEMESTER: 2nd

LECTURER: EJODAMEN Pius Uagbae

GSM: 08066264879

E-MAIL: pius247@gmail.com

AIM OF COURSE

The main aim of this course is to provide the necessary tools for understanding, analyzing and designing efficient systems.

COURSE OBJECTIVES

System Analysis and Design introduces students to basic skills and techniques required for analyzing a system. It also equips them with adequate knowledge to design, develop and implement a new system that meets the needs of users. The course is designed to provide tools that will enhance the student's decision making.

At the end of this course, the students should demonstrate their ability to

1. Discuss the concept of systems.
2. State the stages of system analysis.
3. Explain the Systems design and implementation processes.
4. Describe the various system analysis and design tools
5. Describe the basic elements in system analysis
6. Discuss the process of feasibility study, it's objectives and major factors
7. Describe the basic guide lines for writing a feasibility study report.
8. Explain systems evaluation and maintenance process.
9. Identify the role of system analysts
10. Describe different reasons for developing a new systems projects
11. Select a project out of a number of project requests
12. Enumerate the role of quality assurance in various stages of a system development life cycle.
13. Explain the characteristics of good documentation and its various types and the tools needed for documentation.

COURSE DESCRIPTION

System Concept, System Development Life Cycle Analysis, Fact gathering Techniques, Data Flow Diagrams, Process description, data modeling. System Design: Structure Charts, form designs, security, automated Tools for design.

INSTRUCTIONAL MATERIALS

Recommended Textbooks, Microsoft Visio, MATLAB.

COURSE OUTLINE

1) Overview of System Analysis and Design
2) Project Selection
3) Feasibility Study
4) Fact Finding Techniques
5) System Requirement Specifications and Analysis
6) Data Flow Diagrams (DFD)
7) Structured Systems Design
8) Input Design and Control
9) Output Design
10) File and Database Design
11) System Development
12) System Control and Quantity Assurance
13) Documentation
14) System Implementation

ASSESSMENT

METHOD OF EVALUATION	GRADE (%)
Attendance	10
Assignment	10
Test	10
Final Exam	70

RECOMMENDED BOOKS

Afolorunso, A. A. (2009) CIT 212: System Analysis and Design. National Open University of Nigeria, Lagos, Nigeria.

Dennis, A., Wixom B. H., and Roth R. M. (2012). System Analysis and Design, 5th Edition John Wiley & Sons, Inc., USA.

Shelly, G. B., and Rosenblatt H., J. (2012). Systems Analysis and Design, 9th Edition. Shelly Cashman Series, Course Technology, Cengage Learning, USA

Kendall K. E. and Kendall J. E.(2011) Systems Analysis and Design, 8th Edition. Prentice Hall, One Lake Street, Upper Saddle River, New Jersey 07458, USA.