HOD′S DESK

DR. EZINWANYI MADUKOMA

Information is vital to activities in all areas of government, commerce, industrial and social life. Global happenings in the information field as well as advances in Information and Communication Technologies (ICTs) have been prominent factors driving the demand for individuals with specialized skills to manage information effectively and the impetus for the postgraduate program in Information Resources Management (IRM) at Babcock University. Our mission is to produce professionals with a firm grasp of the principles of information retrieval, information technology and management, as well as individuals who are cognizant of the changing information environment and are able to function effectively in every aspect of the global economy.

LIST OF FACULTY AND STAFF IN IRM DEPARTMENT AND THEIR SPECIALIZATION

S/N	Name	Qualification	Rank	Specialization
1	G.O Alegbeleye	B.Ed., MLIS, PMLS, PhD	Professor	Preservation & Conservation, records Management, Information Management. Archival studies
2	BABALOLA Yemisi T.	B.A, M. Inf. Sc, PhD.	Professor	ICT, Information Literacy
3	MADUKOMA Ezinwanyi	B.IRM., MLIS., PhD	Asso. Professor	Library and Information Science
4	IKONNE Chinyere N.	B.A, (Special) MLS, PhD.	Senior Lecturer	Library & Information Science, Health Information Management

5	Adeoye, S. O.	PhD, MPhil, MBA;	Senior Lecturer	Human Resources Management
6	Nzenwata, U.J.	PhD, MSc. BSc. Comp.,	Adjunct Lecturer	Computer Science, Artificial Intelligence
7	OWOLABI Ruth O.	B.IRM, M. IRM, PhD	Lecturer I	Health Information Management
8	OKORO Obinna J.	B.IRM, M. IRM, PhD	Lecturer I	Business Information, Knowledge Management, Information Science
9	ABOLARIN Mobolude J.	B.IRM, M.IRM, PhD	Lecturer II	Knowledge Management
10	OGUNWEMIMO Taiwo	B.LIS; M.INF.SCI	Assistant Lecturer	Business Information Management ICT
11	LADELE Morolayo	HND, B.ed., MSc. IRM, PhD	Lecturer II	Library and Information Science
12	AKINTUNDE Ebunoluwa	BIRM, MSc. IRM	Lab. Technologist	Lab Technologist
13	SOFOWORA Omobolanle G.	B.Sc, M.Sc	Conf. Sec.	Office Management

Aims/Objectives

In keeping with the mission of Babcock University, this programme aims to train individuals for professional work in information service delivery in all areas of public, business, industrial and social life. The specific objectives are to:
1. Develop a critical awareness and understanding of the principles of librarianship and information service delivery;
2. Develop skills in information identification, selection, organization, retrieva, andl dissemination in paper, digital and multimedia formats;
3. Develop ability to create, enhance and exploit knowledge assets in organizations;
4. Train senior personnel to manage records in all formats;
5. Promote professional skill in health information management;
6. Develop professional skills in the selectivity and screening of information in the field of business management.

MISSION STATEMENT

To produce graduates who are skilled at managing information and associated technologies in various organizational environments through qualitative Christian education.

OBJECTIVES OF INFORMATION RESOURCES MANAGEMENT

In keeping with the mission of Babcock University, the objectives of the Bachelor of Science in Information Resources Management are to:
- Produce graduates who understand the basic principles of systematic acquisition, retrieval, storage and processing of all kinds of data useful for investment decisions.
- Prepare graduates with the ability to contextualize information management processes and creation of relevant data banks useful for academic and scientific research works.
- Produce graduates who understand the dynamics of the contemporary information society and are equipped with ethical and risk management capabilities to preserve such information for business and other uses in the society.
- Prepare graduates to be information technology-literate, and responsible users of emerging technologies.
- Produce professionals who can function effectively in the public and private sectors of the Nigerian society
- Equip students with entrepreneurial skills to be job creators and employers of labour in the information industry.

JOB OPPORTUNITIES FOR GRADUATES OF INFORMATION RESOURCES MANAGEMENT

Graduates of Information Resources Management have opportunity of working in a variety of information environments like records offices, archives, museums, libraries, publishing houses, information centers, banks, insurance companies, medical and health institutions, manufacturing companies, broadcasting organizations, Non-governmental Organizations (NGOs), law firms, telecommunication industries and international organizations such as WHO, UNDP, UNICEF, etc.

SCHOOLS THAT OFFER SIMILAR PROGRAMME
Information Resources Management as a discipline was introduced into some American, European and African schools some decades ago. Those that readily come to mind include: University of Arizona School of Information Resources, Kansa's School of Library and Information Management, Berkeley School of Information Management and Systems (USA); University of Northumbria, University of Strathclyde, University of Sheffield (UK) and University of Natal in South Africa.

ADMISSION REQUIREMENTS
Candidates seeking admission into the undergraduate programme of the Department of Information Resources Management must possess at least 5 "O" Level credits in at most two sittings. A credit in English Language and Mathematics is compulsory. Prospective candidates to Babcock University must sit and pass the university entrance (written and oral) examination.

DURATION OF THE PROGRAMME
The Bachelor of Science in Information Resources Management program is planned for a period of four (4) years consisting of eight (8) semesters. Each semester consists of 17 weeks of formal teaching and assessments.

MINIMUM REQUIREMENTS FOR GRADUATION

The general requirements for graduation are as follows:

1. Students must to take a minimum of 186 credits and pass with at least a C grade. This will include all the core and required courses from 100 to 400 level. Each 3-credit course includes a scheduled compulsory one (1) hour practical per week.
2. Students must undergo a six (6) months industrial training at the information unit of any organization of their choice. The goal of the industrial training is to expose students to information management practices in organizational setting. Upon completion, they are to submit their log books and report of the knowledge and skills acquired during the training.
3. Finally, students must complete, defend and submit a research project duly supervised by a qualified member of staff.

TABLE SHOWING MINIMUM CREDITS REQUIRED FOR GRADUATION

LEVEL	GENERAL EDUCATION COURSES	DEPARTMENTAL COURSES	TOTAL
100	9	30	39
200	9	25	34
300	7	26	33
400	4	31	34
TOTAL	29	112	140

DEFINITION OF COURSES

Core/ Compulsory Courses

These are courses specified by the department which a student must take and pass with a minimum of 50 percent otherwise the course must be repeated. Core/compulsory courses are courses which students must take and pass. Core/compulsory courses constitute about 70 per cent of all the course units that students must take to complete the requirement for the BSc. IRM.

Elective Courses

These are courses students are free to choose, as they desire. The students are required to do at least 3 of such courses giving a minimum of 6 credit hours.

Pre-requisite Courses

A pre-requisite course is that which must be taken first and passed in order to enhance the understanding of subsequent course or courses.

General Education Courses

General education courses are taken from any area regardless of student's specialization, with the aim of broadening the student's academic horizon.

Credit Unit

A credit unit is the equivalent of fifty (50) minutes lecture/tutorial work per week per semester.

Course Codes

Babcock University - Information Resources Management BU - IRM
General Study Courses   GST
Entrepreneur Courses   ENT

COURSE SCHEDULE

100 LEVEL

COURSE CODE	COURSE TITLE	STATUS Core/elective	SEMESTER 1ST	2ND
BU-GST 011	Citizenship Orientation		0	
BU-GST 012	Citizenship Orientation			0
BU-IRM 101	Information Society	C	3	
BU-IRM 102	Statistics for Information Professionals	C		3
BU-IRM 103	Museum Informatics	C	3	
BU-IRM 104	Indigenous Knowledge Management	C		2
GST 111	Communication in English	C	2	
BU-GST 120	ICT Fundamentals & Office Productivity Management	C	1	
BU-GST 126	Life and teaching of Christ the Messiah	C		3
BU-GST 112	Health Principles	C		1
GST 112	Nigerian Peoples and Culture	C		2
AMS 101	Principles of Management	C	2	
AMS 102	Basic Mathematics	C		2
AMS 103	Introduction to Computer	C	2	
AMS 104	Principles of Project Management	C		2
IRM 102	Introduction to Information Science	C		3
IRM108	Introduction to Reference sources and Services	C		3
IRM 106	Introduction to records and Information Management	C		3
IRM 107	Fundamentals Resources Management	C	3	
	Total	**TOTAL**	**16**	**24**

BU- IRM 101 Information Society   (2 Units; CORE; LH 30; PH =NIL)

Learning Outcomes
By the end of this course, students should be able to:
1. Explain 5 roles of information in the society
2. Explain 2 perceptions of developed and undeveloped information society
3. Discuss 4 historical developments of information society
4. Discuss 3 theories of information society
5. Explore 5 roles of technology in information society
6. Explain 5 dimensions of information society
7. Discuss 4 legal and ethical issues in the use of ICTs in the society

8. Discuss 5 the issue of information and confidentiality in Nigeria
9. Identify 4 forms of information mis-use in information society

Course Contents
Concept of Information. Role of information in the society. Concept and meaning of information society. History and theories of information society. Use of information and communication technologies. Dimensions of information society. Impact of technological trends in information society. Economics of information. Ethical and legal issues in information. Privacy and confidentiality. Freedom of information. Ownership of information. Information security. Intellectual property. Information Plagiarism. Mis-use of information. Information use policies.

BU-IRM 102 Statistics for Information Professionals (2 Units; CORE; LH 30; PH =NIL)

Learning Outcomes
On completion of the course, students should be able to:
1. Discuss five basic statistical concepts
2. Identify ten roles of statistics in Information Management
3. Give three examples of a population from a statistical point of view
4. Identify at least five characteristics of sample
5. Explain three sampling techniques
6. Describe two types of variables
7. List 4 data types and discuss levels of measurement
8. Explain data using three measures of central tendency
9. Interpret at least five inferential statistical analyses
10. Explain five issues of confidentiality in data collection

Course Contents
Basic statistical concepts and theories. Data computation. Interpretation of basic statistical measures. Application of statistical models. Variable and data types. Levels of measurement. Measures of central tendency. Graphical representation of data. Data cleaning. Sampling techniques. Probability distributions. Hypothesis testing. Confidence Intervals. T-tests. Correlation. Simple and multiple linear regression. Confidentiality and anonymity in data collection. Binomial Distribution. Time series Analysis.

Minimum Academic Standard
Information Resource Center/Laboratory

BU-IRM 103 Museum Informatics (3 Units; Core; LH = 30; PH = 45)

Learning Outcomes
After the course, students should be able to:
1. Explain four terminologies of museum informatics
2. Differentiate libraries and archives from museums as memory institutions
3. Analyze the influence of information technologies on museum management
4. Identify five ways to preserve people's cultural heritage
5. Evaluate the modern museum as a socio-cultural information environment

6. Evaluate the management of 2 museums in Nigeria

Course Contents
Concept of museum informatics. Historical origin of museum informatics. Modern museums management. Metadata and tagging in museum. Museum curation. Museum as a socio-cultural heritage. Terminologies in museum informatics. Digitization of museum process. Digital preservation and conservation in museums. Information representation in museums. Standards and metadata. Libraries and museums. Archives and museums. Information policy in museums. Ethical and legal issues in museum informatics. Emerging technology and trends in museum informatics. Visitor Management for museum.

Minimum Academic Standard
Information Resources Centre/Laboratory

BU – IRM 104 Indigenous Knowledge Management (2 Units; Core; LH = 15 PH = 45)

Learning Outcomes
Upon completion of this course, students should be able to:
1. Discuss 4 differences between indigenous knowledge and Scientific knowledge
2. Enumerate 4 types of indigenous knowledge
3. Describe 4 types of indigenous practices
4. Enumerate 5 roles of indigenous knowledge management for national development
5. Describe 5 roles of women in indigenous knowledge management
6. Identify 5 uses of indigenous knowledge for community development

Course Contents
Overview of indigenous knowledge. Scope of indigenous knowledge system. Characteristics of indigenous knowledge management. Sources of indigenous knowledge. Types of indigenous knowledge. Indigenous knowledge and national development. Oral histories and traditions. Indigenous industries. Scientific knowledge and indigenous knowledge. Preservation and dissemination of indigenous knowledge. Application of indigenous knowledge management. Protecting indigenous knowledge. Role of women in indigenous knowledge management. IT applications in the management of indigenous knowledge. Role of information professionals in indigenous knowledge management. Challenges in managing indigenous knowledge in Nigeria. Digital preservation of IK.

Minimum Academic Standard
Information Resource Center/Laboratory

GST 111   Communication in English

Learning Outcomes

At the end of this course, students should be able to:

1. Identify possible sound patterns in English Language;

2. List notable Language skills;
3. Classify word formation processes;
4. Construct simple and fairly complex sentences in English;
5. Apply logical and critical reasoning skills for meaningful presentations;
6. Demonstrate an appreciable level of the art of public speaking and listening; and
7. Write simple and technical reports.

Course Contents

Sound patterns in English Language (vowels and consonants, phonetics and phonology). English word classes (lexical and grammatical words, definitions, forms, functions, usages, collocations). Sentence in English (types: structural and functional, simple and complex). Grammar and Usage (tense, mood, modality and concord, aspects of language use in everyday life). Logical and Critical Thinking and Reasoning Methods (Logic and Syllogism, Inductive and Deductive Argument and Reasoning Methods, Analogy, Generalisation and Explanations). Ethical considerations, Copyright Rules and Infringements. Writing Activities: (Pre-writing , Writing, Post writing, Editing and Proofreading; Brainstorming, outlining, Paragraphing, Types of writing, Summary, Essays, Letter, Curriculum Vitae, Report writing, Note making etc. Mechanics of writing). Comprehension Strategies: (Reading and types of Reading, Comprehension Skills, 3RsQ). Information and Communication Technology in modern Language Learning. Language skills for effective communication. Major word formation processes. Writing and reading comprehension strategies. Logical and critical reasoning for meaningful presentations. Art of public speaking and listening. Report writing.

GST 112: Nigerian People and Culture   (2 Unit C: LH 30)

Learning Outcomes

At the end of the course, students should be able to:

1. Analyse the historical foundation of the Nigerian culture and arts in pre-colonial times;
2. List and identify the major linguistic groups in Nigeria;
3. Explain the gradual evolution of Nigeria as a political unit;
4. Analyse the concepts of Trade, Economic and Self-reliance status of the Nigerian peoples towards national development;
5. Enumerate the challenges of the Nigerian State towards Nation building
6. Analyse the role of the Judiciary in upholding people's fundamental rights
7. Identify acceptable norms and values of the major ethnic groups in Nigeria; and
8. List and suggest possible solutions to identifiable Nigerian environmental, moral and value problems.

Course Contents
Nigerian history, culture and art up to 1800 (Yoruba, Hausa and Igbo peoples and culture; peoples and culture of the ethnic minority groups). Nigeria under colonial rule (advent of colonial rule in Nigeria; Colonial administration of Nigeria). Evolution of Nigeria as a political unit (amalgamation of Nigeria in 1914; formation of political parties in Nigeria; Nationalist movement

and struggle for independence). Nigeria and challenges of nation building (military intervention in Nigerian politics; Nigerian Civil War). Concept of trade and economics of self-reliance (indigenous trade and market system; indigenous apprenticeship system among Nigeria people; trade, skill acquisition and self-reliance). Social justices and national development (law definition and classification. Judiciary and fundamental rights. Individual, norms and values (basic Nigeria norms and values, patterns of citizenship acquisition; citizenship and civic responsibilities; indigenous languages, usage and development; negative attitudes and conducts. Cultism, kidnapping and other related social vices). Re-orientation, moral and national values (The 3R's – Reconstruction, Rehabilitation and Re-orientation; Re-orientation Strategies: Operation Feed the Nation (OFN), Green Revolution, Austerity Measures, War Against Indiscipline (WAI), War Against Indiscipline and Corruption (WAIC), Mass Mobilization for Self-Reliance, Social Justice and Economic Recovery (MAMSER), National Orientation Agency (NOA). Current socio-political and cultural developments in Nigeria.

AMS 101: Principles of Management   (2 Units C: LH 30)

Learning Outcomes
On completion of this course, students should be able to:
1. Demonstrate understanding of basic concepts related to management understand the roles, skills and functions of management;
2. Appreciate organizational problems and how managerial decisions are arrived at; and
3. Understand the complexities associated with management of human resources in the organizations and how to apply the knowledge in handling these complexities

Course Contents
Basic Concepts in Management. Management Principles (Functions of the Manager-Planning: Nature and Purpose the organizing function, Department, Line and Staff Authority, Staffing and Directing; Selection of Employees and Managers, Appraisal of Managers, Management Development, Nature of Directing, Motivation Leadership, Controlling: the Control Process, Control technique, recent developments in the control Function). The Nigerian environment (Management problems in Nigeria, Challenges of Indigenization, transferability of Management system).

AMS 102: Basic Mathematics   (2 Units C: LH 30)

Learning Outcomes
At the end of the course students should be able to:
1. Understand the basic concepts of mathematics;
2. Have a preliminary understanding of mathematical applications in the field of Management;
3. Perform basic computations in Algebra, differential calculus and integral calculus; and
4. Develop problem-solving skills from the mathematical ideas learnt.

Course Contents
Number Systems. Indices, Surds and Logarithms. Polynomials. Remainder and factor theorems. Polynomial equations. Rational functions. Partial fractions. Fields. Ordered fields. Inequalities. Mathematical Induction. Permutations and combinations. Binomial theorem. Sequences and

series. The quadratic equation and function. Relation between the roots and the coefficients. Complex numbers. Addition. Subtraction, Multiplication and division. Argand diagram. De-Moivre's theorem, n-th roots of complex numbers. Elementary set theory. Venn diagrams and applications. De-Morgan's laws. Trigonometry. Elementary properties of basic trigonometric functions. Addition formulae and basic identities. Sine and cosine formulae. Half angle formulae. Area of a triangle. Solution of trigonometric equations. Inverse trigonometric functions. Functions. Concept and notation. Examples. Composition, Exponential and logarithmic functions. Graphs and properties. Limits and continuity. Techniques for finding limits. The derivative. Calculation from first principles. Techniques of differentiation. Chain rule. Higher order derivatives. Extremum problems. Mean-value theorem. Applications. Indeterminate forms and L' Hospital's rule. Taylor's and MaClauren's series. Curve sketching. Integrations as the reverse of differentiation, as area, as limit of finite sums. Definite integrals. Properties of definite integrals. Applications.

AMS 103: Introduction to Computer   (2 Units C: LH 30)

Learning Outcomes

Students should be able to:

1. Understand basic computer concepts, fundamental functions and operations of the computer;
2. Identify the basic elements required in a computer system;
3. Use an operating system software in the Windows environment;
4. Produce electronic documents using basic software applications such as Microsoft Office applications; and design basic algorithms for computer programs using basic programming languages using Web browsers, search engines and e-mail.

Course Contents
History and Development of Computer Technology. The Why and How of Computers. Computer Types: Analogue, Digital, and Hybrid. Central Preparation Equipment: Keypunch, Sorter etc. Data Transmission, Nature, Speed and Error Detection. Data Capture and Validation including Error Detection. Systems Analysis and Design. Modern data storage and retrieval system. Introduction to programming languages. Introduction to basic system and application software.

AMS 104: Principles of Project Management   (2 Units C: LH 30)

Learning Outcomes
At the end of this course students should be able to:
1. Articulate the series of steps/processes & strategies to achieve end results;
2. Determine, procure, optimize resources (human, material, & financial) needed;
3. Apply the Project Management processes to initiate, plan, execute, monitor and control projects; and
4. Have a working knowledge of key project management methods.

Course Contents
Build your understanding of the key Foundation elements. Activity areas and Processes of project delivery within any project management environment. The generic tools and techniques used in project delivery. The different project management methodologies from traditional methods like Waterfall to more conventional delivery methods such as Agile.

IRM 102: Introduction to Information Science   (3 Units C: LH 45)

Learning Outcomes

At the end of the course, students should be able to:
1. Understand the history and philosophy of information technology;
2. Differentiate between data, information communication and knowledge;
3. Appreciate the value of information in society;
4. Measure and evaluate the quality of information available; and
5. Identify qualitative information that can serve as basis for sound decision making.

Course Contents
An overview of the history, philosophy, purpose, functions and processes, users and collections of academic, public, school and special libraries. The history and trends of books and other media, publishing, and information technology. Historical development of information science; relationship to other disciplines and differences between data, information, communication and knowledge; the nature of information, forms of information, quality of good information, the information life cycle, the role and value of information in the society. The information industry, information profession, information services. Analysis of the specific cases that reflect the professional agenda of the information profession including intellectual freedom, community service, professional ethics, social responsibilities, intellectual property and literacy.

AMS 104: Principles of Project Management   (2 Units C: LH 30)

Learning Outcomes
At the end of this course students should be able to:
1. Articulate the series of steps/processes & strategies to achieve end results;
2. Determine, procure, optimize resources (human, material, & financial) needed;
3. Apply the Project Management processes to initiate, plan, execute, monitor and control projects; and
4. Have a working knowledge of key project management methods.

Course Contents
Build your understanding of the key Foundation elements. Activity areas and Processes of project delivery within any project management environment. The generic tools and techniques used in project delivery. The different project management methodologies from traditional methods like Waterfall to more conventional delivery methods such as Agile.

IRM 102: Introduction to Information Science   (3 Units C: LH 45)

Learning Outcomes
At the end of the course, students should be able to:
1. Understand the history and philosophy of information technology;
2. Differentiate between data, information communication and knowledge;
3. Appreciate the value of information in society;
4. Measure and evaluate the quality of information available; and
5. Identify qualitative information that can serve as basis for sound decision making.

Course Contents
An overview of the history, philosophy, purpose, functions and processes, users and collections of academic, public, school and special libraries. The history and trends of books and other media, publishing, and information technology. Historical development of information science; relationship to other disciplines and differences between data, information, communication and knowledge; the nature of information, forms of information, quality of good information, the information life cycle, the role and value of information in the society. The information industry, information profession, information services. Analysis of the specific cases that reflect the professional agenda of the information profession including intellectual freedom, community service, professional ethics, social responsibilities, intellectual property and literacy. management of organizations and their information resources. Topical areas include: Information resources. Types of information. Value of information. Information processing techniques. Information processing personnel and users. Information users and types of information needs. Information systems structure, and information delivery techniques.

200 LEVEL

COURSE CODE	COURSE TITLE	STATUS Core/elective	SEMESTER 1ST	2ND
BU-GST 021	Citizenship Orientation		0	
BU-GST 022	Citizenship Orientation			0
BU - IRM 201	Indexing and Abstracting	C	2	
BU - IRM 205	Community Information Services	C	2	
BU-IRM 207	Computer Programming for Information Professionals I	C	3	
BU-IRM 208	Computer Programming for Information Professionals II	C		3
BU-GST 221	Introduction to Agriculture	C	1	
BU-GST 290	Introduction to Data Analytics	C	1	
BU-GST 215	Adventist Heritage	C	3	
BU-GST 200	Communication in French	C		1
BU-GST 220	Origins and Science	C		1
GST 212	Philosophy, Logic, and Human existence	C		2
ENT 211	Entrepreneurship and Innovation	C	2	
IRM 203	Theory and Organization of Knowledge	C	3	
IRM 206	Business Information Resources	C		3

IRM 202	Conservation and preservation of Information resources	C		3
IRM 218	Knowledge Management Tools and Techniques	C		3
IRM 222	Cataloguing and Classification	C		3
		TOTAL	17	19

BU- IRM 201 Indexing and Abstracting (2 Units; Core; LH =15; PH = 30)

Learning Outcomes
Upon completion of this course, students would have learnt to:
1. Describe two indexing and abstracting tool
2. Explain two types of indexing techniques
3. Explain three indexing languages and systems
4. Explain one example of information technology use in indexing
5. Analyze four rules and principles guiding indexing practice and book index
6. State five qualities of a good index
7. Differentiate between descriptive and informative abstract
8. Explain five steps in abstract preparation

Course Contents
Concept of indexing and abstracting. Scope of indexing. Scope of abstracting. Traditional and computerized approaches to indexing. Thesaurus construction and maintenance. The nature and structure of indexes. Indexing and editing procedures. Types of indexes. Index evaluation. Indexing languages. Abstracting technique. Types of abstracts. Abstracting principles. Subject analysis. Use of thesaurus. Use of subject heading lists. Index evaluation.

Minimum Academic Standard
Information Resources Centre/Laboratory

BU-IRM 205 Community Information Services (2 Units, CORE: LH=30; PH= NIL)

Learning Outcomes
By the end of this course, the students should be able to:
1. Define community information services
2. Differentiate general information from community information
3. Identify four sources of community information
4. List four types of public libraries
5. Explain the differences between political information and other types of information
6. Discuss 5 importance of community library to community information services
7. State 5 ways community libraries are funded
8. Evaluate 4 community projects
9. Distinguish falsehood from truth and false information from genuine information.

Course Contents

Concept of community information services. Importance of community information services. Community Information Services Nigeria. Problem solving information. Community participation in democratic process. Types of community information services. Formal information channels. False and genuine information. Sources of community information. Sources and processing of oral archives. Political information. Public libraries. Community library. Funding of public libraries. Community projects. Examples of community projects. Involvement in community projects. Community needs analysis.

BU-IRM 207 Computer Programming for Information Professionals I (3 Units; Core; LH = 30; PH = 45)

Learning Outcomes
At the end of this course, students will be able to:
1. Interpret 4 test code using VB.NET
2. Create 2 databases using VB.NET
3. Enumerate 3 data types
4. Review 2 computer operating systems
5. Appraise any database program for information handling.

Course Contents
Introduction to Visual studio. NET and visual basic. Basic concepts in VB. NET programming. Development algorithms. Data types. Concept of variables. VB.NET operators and expressions. Output formatting. Control structures. Classes methods. Class properties. Arrays inheritance and exceptions in VB.NET. Windows forms. Event handling. Dialog boxes using controls. Database programming. Ethics of coding.

Minimum Academic Standard
Information Resource Centre/Laboratory
BU-IRM 208 Computer Programming for Information Professionals II (3 Units; Core; LH = 30; PH = 45)

Learning Outcomes
At the end of this course, students will be able to:
1. List two 2 computer programming languages
2. Explain 5 importance of Computer Program
3. Discuss C++ Programming languages
4. State 4 steps to algorithm development
5. Identify 5 errors in coding
6. Explain 1 program style and code documentation technique

Course Contents
Introduction to C++programming language. Understanding the UNIX environment. C++ basic parts. Problem solving. Algorithm development. Basic data types. Control Structures and arrays. Basic class concepts. Constructors and destructors. Operator over loads. Program style. Program design. Code documentation techniques and program correctness. Procedural and Object-oriented

programming. File processing. Introduction to Stacks and queues. Application of Programming language. Code documentation technique.

Minimum Academic Standard
Information Resource Centre/Laboratory

GST 212 : Philosophy, Logic and Human Existence (2 Units C: LH 30)

Learning Outcomes

A student who has successfully gone through this course should be able to:

1. Know the basic features of philosophy as an academic discipline;
2. Identify the main branches of philosophy & the centrality of logic in philosophical discourse;
3. Know the elementary rules of reasoning;
4. Distinguish between valid and invalid arguments;
5. Think critically and assess arguments in texts, conversations and day-to-day discussions;
6. Critically asses the rationality or otherwise of human conduct under different existential conditions;
7. Develop the capacity to extrapolate and deploy expertise in logic to other areas of knowledge, and
8. Guide his or her actions, using the knowledge and expertise acquired in philosophy and logic.

Course Contents
Scope of philosophy; notions, meanings, branches and problems of philosophy. Logic as an indispensable tool of philosophy. Elements of syllogism, symbolic logic— the first nine rules of inference. Informal fallacies, laws of thought, nature of arguments. Valid and invalid arguments, logic of form and logic of content — deduction, induction and inferences. Creative and critical thinking. Impact of philosophy on human existence. Philosophy and politics, philosophy and human conduct, philosophy and religion, philosophy and human values, philosophy and character molding, etc.

ENT 211: Entrepreneurship and Innovation (2 Units C: LH 15; PH 45)

Learning Outcomes
At the end of this course, students should be able to:
1. Explain the concepts and theories of entrepreneurship, intrapreneurship, opportunity seeking, new value creation, and risk taking;
2. State the characteristics of an entrepreneur;
3. Analyze the importance of micro and small businesses in wealth creation, employment, and financial independence;
4. Engage in entrepreneurial thinking;
5. Identify key elements in innovation;

6. Describe stages in enterprise formation, partnership and networking including business planning;
7. Describe contemporary entrepreneurial issues in Nigeria, Africa and the rest of the world; and
8. State the basic principles of e-commerce

Course Contents
Concept of entrepreneurship (entrepreneurship, intrapreneurship/corporate entrepreneurship,). theories, rationale and relevance of entrepreneurship (Schumpeterian and other perspectives, risk-taking, necessity and opportunity-based entrepreneurship and creative destruction). Characteristics of entrepreneurs (opportunity seeker, risk taker, natural and nurtured, problem solver and change agent, innovator and creative thinker). Entrepreneurial thinking (critical thinking, reflective thinking, and creative thinking). Innovation (concept of innovation, dimensions of innovation, change and innovation, knowledge and innovation). Enterprise formation, partnership and networking (basics of business plan, forms of business ownership, business registration and forming alliances and joint ventures). Contemporary entrepreneurship issues (knowledge, skills and technology, intellectual property, virtual office, networking). Entrepreneurship in Nigeria (biography of inspirational entrepreneurs, youth and women entrepreneurship, entrepreneurship support institutions, youth enterprise networks and environmental and cultural barriers to entrepreneurship). Basic principles of e-commerce.

IRM 203: Theory and Organization of Knowledge   **(3 Units C: LH 45)**

Learning Outcomes
At the end of the course, students should be able to:
1. Understand how bibliographic description is carried out;
2. Know how to conduct subject analysis;
3. Be very conversant with both print and electronic information in organization;
4. Understand how to carry out cataloguing including doing it online; and
5. Know how to carry out catalogue maintenance and ensure quality control.

Course Contents
Introduction to the theories and practice of bibliographic description and subject analysis. Covers the organization of both print and electronic information including discussion and application of Anglo-American Cataloguing Rules 2nd edition revised (AACR2R), DDC and LCC Designed for students to understand cataloguing and/or online catalogue maintenance and quality control as well as other areas of library and information services.

IRM 206: Business Information Resources   **(3 Units C: LH 45)**

Learning Outcomes
At the end of the course, students should be able to:
1. Know various search engines;
2. Understand how to use the numerous search engines available;
3. Differentiate between the various search engines;
4. Explain to users the most appropriate search engine based on the kind of information sought; and

5. Understand the basic reference sources and services.

Course Contents
Information needs and uses. Basic reference sources and services. Information resources in various disciplines. Reference work. Online searching and use. Introduction to information literacy.

IRM 202: Conservation and Preservation of Information Resources (3 Units C: LH 45)

Learning Outcomes
At the end of the course, students should be able to:
1. know how to manage and prevent deterioration of library materials;
2. identify information materials;
3. understand how to deploy preservation policies in libraries;
4. Know how to manage information centres; and
5. Understand the various strategies for securing information.

Course Contents
Definition, concepts and scope of preservation and conservation. Consideration of the many factors contributing to the deterioration of library materials of all kinds of media. An overview of resources and strategies for preventing and controlling the deterioration of information materials. Preventive preservation and security of information. Preservation policy and its application in library, archives and information centers.

IRM 218: Knowledge Management Tools and Technologies   (3 Units C: LH 45)

Learning Outcomes
At the end of the course, students should be able to:
1. Know systems that organize and distribute knowledge;
2. Understand knowledge application systems and how they work;
3. Utilize knowledge to solve challenges faced by organizations;
4. Understand synthesizing technologies in knowledge management; and
5. Understand how to leverage on artificial intelligence.

Course Contents
Technologies to manage knowledge (artificial intelligence). Digital libraries, repositories etc; Preserving and applying human expertise to knowledge-based systems. Using past history explicitly as knowledge (case-based systems; knowledge elicitation: converting tacit knowledge to explicit). Discovering new knowledge (data mining; Text KM and text mining). Knowledge discovery; systems that create knowledge; Knowledge capture systems: concept, maps, process modeling; RSS; Wikis; Delphi method; etc. Knowledge sharing system (systems that organize and distribute knowledge). Ontology development systems. Categorization and classification tools. Knowledge application systems. Systems that utilize knowledge.

IRM 222: Cataloguing and Classification (3 Units C: LH 45)

Learning Outcomes

At the end of the course, students should be able to:
1. Understand principles of cataloguing;
2. Understand how to develop catalogue codes;
3. Comprehend the general rules of for description of various library materials;
4. Identify choice and form of access point; and
5. Distinguish between choice and form of access point.

Course Contents

Principles of Cataloguing. Development of cataloguing codes. Uses of AACR2 and general rules for description of various library materials. Choice and form of access point. Sears List of Subject Headings. Library of Congress Subject Headings and other subject analysis tools. Alphabetical and classified catalogues construction and use. DDC & LC. Classification schemes. Use of cutter tables.

Minimum Academic Standard

Information Resource Centre/Laboratory

300 LEVEL

COURSE CODE	COURSE TITLE	STATUS Core/Elective	SEMESTER 1ST	2ND
BU-GST 031	Citizenship Orientation		0	
BU-GST 032	Citizenship Orientation			0
BU - IRM 301	Technical Writing and Reporting	C	3	
BU - IRM 303	Data Literacy	C	3	
BU-GST 310	Data Analysis using Advanced Excel/SPSS/Power BI/Table AU	C	1	
BU-GST 317	Fundamentals of Christian Faith	C	3	
BU-GST 312	Family Life	C		1
GST 312	Peace and Conflict Resolution	C		2
ENT 312	Venture Creation	C		2
IRM311	Practical Field Work	C	3	
IRM 323	Data Warehousing and Mining	C	3	
IRM 325	Information Risk Management	C	3	
IRM 304	Research Methods in IRM	C		3
IRM 308	Archives and Manuscripts Management	C		3
IRM 322	Collection Management	C		3
IRM306	Entrepreneurship in Information Resources Management	C		2
		TOTAL	19	16

BU-IRM 301 Technical Report Writing (3 units; Core; LH=30; PH=45)

Learning Outcomes

After completing this course, students will be able to:
   1. List five different types of technical reports

2. Synthesize information from different sources and organize into logical sequence
3. Write two technical reports for specific audiences
4. Edit and rewrite two poorly written technical reports
5. Demonstrate effective use of vocabulary, punctuation and grammar in writing reports
6. Use appropriate style, tone, and format in writing reports with varied degrees of formality
7. Select and use graphics appropriately in report writing and presentation
8. Present two reports orally using effective delivery techniques
9. Apply citation by referencing five sources used in writing reports following a specified style

Course Contents
Overview of technical report. Features of a technical report. Differences between technical and non-technical writing. Components of a technical report. Different types of technical reports. Communication process. The role of communication in organizations. Audience analysis. Audience adaptation. Mechanics of good writing. Planning the report. Paragraph development. Writing the first draft. Revising the first draft. Editing and proofreading. Effective use of tables. Effective use of graphs and charts. Citation and referencing styles. Writing abstracts and executive summaries. Effective oral presentation.

BU-IRM 303 Data Literacy for Information Professionals (3 units; Core; LH=30; PH=45)

Learning Outcomes
After completing this course, students will be able to:
1. Identify at least five credible sources of data
2. Access data from at least five credible sources
3. Distinguish four different data types
4. Explain four different data scales
5. Mention five statistical tools used to analyze data
6. Analyze two data sets using descriptive statistics using SPSS
7. Analyze two data sets using inferential statistics in SPSS
8. Interpret at least three data analysis output correctly
9. Evaluate assertions and detect biases in at least 3 data presentations
10. Explain data ethics

Course Contents
Data literacy. Data culture. Data economy. Data lifecycle. Data collection and acquisition. Data types. Credible data sources. Developing hypotheses. Basic data analysis. Data interpretation. Data evaluation and critique. Data visualization and data storytelling. Data citation. Data documentation and organization. Data storage and back up. Long term preservation and archiving of data. Metadata creation. Data governance. Data sharing. Data ethics. Data laws and policies. Data politics.

Minimum Academic Standard
Information Resource Centre/Laboratory

GST 312: Peace and Conflict Resolution   (2 Units C: LH 30)

Learning Outcomes
At the end of the course, students should be able to:
1. Analyze the concepts of peace, conflict and security;
2. List major forms, types and root causes of conflict and violence;
3. Differentiate between conflict and terrorism;
4. Enumerate security and peace building strategies; and
5. Describe roles of international organizations, media and traditional institutions in
6. Peace building.

Course Contents
Concepts of peace, conflict and security in a multi-ethnic nation. Types and theories of conflicts: ethnic, religious, economic, geo-political conflicts. Structural conflict theory, realist theory of conflict, frustration-aggression conflict theory. Root causes of conflict and violence in Africa: indigene and settlers' phenomena; boundary/boarder disputes; political disputes; ethnic disputes and rivalries. Economic inequalities; social dispute. Nationalist movements and agitations. Selected conflict case studies – Tiv-Junkun; Zango Kartaf. Chieftaincy and land disputes, etc. Peace building, management of conflicts and security. Peace and human development. Approaches to ease & conflict management - (religious, government, community leaders etc.). Elements of peace studies and conflict resolution. Conflict dynamics assessment scales. Constructive and destructive, justice and legal framework. Concepts of social justice; the Nigerian legal system. Insurgency and terrorism. Peace mediation and peace keeping. Peace and Security Council (international, national and local levels). Agents of conflict resolution – conventions, treaties, community policing. Evolution and imperatives. Alternative Dispute Resolution (ADR). Dialogue, arbitration, negotiation, collaboration, etc. Roles of international organizations in conflict resolution - (a). The United Nations (UN) and its conflict resolution organs; the African Union and Peace Security Council. ECOWAS in peace keeping. The media and traditional institutions in peace building. Managing post-conflict situations; refugees. Internally Displaced Persons (IDPS). The role of NGOs in post-conflict situations.

ENT 312: Venture Creation (2 Units C: LH 15; PH 45)

Learning Outcomes
At the end of this course, students, through case study and practical approaches, should be able to:
1. Describe the key steps in venture creation;
2. Spot opportunities in problems and in high potential sectors regardless of geographical location;
3. State how original products, ideas, and concepts are developed;
4. Develop business concept for further incubation or pitching for funding;
5. Identify key sources of entrepreneurial finance;
implement the requirements for establishing and managing micro and small enterprises
conduct entrepreneurial marketing and e-commerce;
6. Apply a wide variety of emerging technological solutions to entrepreneurship, and

7. Appreciate why ventures fail due to lack of planning and poor implementation.

Course Contents
Opportunity identification: sources of business opportunities in Nigeria, environmental scanning. Demand and supply gap/unmet needs/market gaps/market research. Unutilised resources, social and climate conditions and technology adoption gap. New business development: business planning, market research, etc. Entrepreneurial finance: venture capital, equity finance. Micro finance, personal savings, small business investment organizations and business plan competition. Entrepreneurial marketing and e-commerce. Principles of marketing, customer acquisition and retention. B2B, C2C and B2C models of e-commerce. First mover advantage, e-commerce business models and successful e-commerce companies. Small business management/family business. Leadership & management: basic book keeping, nature of family business and Family Business Growth Model. Negotiations and business communication: strategy and tactics of negotiation/bargaining. Traditional and modern business communication methods. Opportunity Discovery Demonstrations: business idea generation and presentations. Business idea contest, brainstorming sessions, idea pitching, etc. Technological Solutions: the concepts of market/customer solution, customer solution and emerging technologies. Business Applications of new technologies: Artificial Intelligence (AI), Virtual/Mixed Reality (VR), Internet of Things (IoTs), Blockchain, Cloud Computing, Renewable Energy, etc. Digital business and e-commerce strategies).

IRM311   Practical Field Work

IRM 311: Administration of Libraries and Information Centers (3 Units C: LH 45)
Learning Outcomes
At the end of the course, students should be able to:
1. Understand how to handle personnel related issues in a library;
2. Conduct interviews, select and place staff based on their capabilities;
3. Develop capacity for determining non-performing staff and the most appropriate time to let them go;
4. Understand environmental factors and organizational behaviour that impact on performance of organizations; and
5. Know the functions of management as they apply to the management of information resources.

Course Contents
Administration in libraries, including organizational, personnel, and management issues (e.g. interviewing, hiring, and firing, etc.). Communication, library planning, and Book-Keeping. Introduction to internal and external management issues and practices in information organizations. Internal issues (organizational behavior, organizational theory, personnel, budgeting, planning). External issues (organizational environments, politics, marketing, strategic planning and funding sources). Examination of the four elements of the management process – planning, organizing, leading, and controlling as they apply to the management of information resources. Leadership in different sections of information resources centers, supervision, staff

training, job analysis, work design and work environment, employee relations and human rights obligations etc.

IRM 323: Management Information Systems   **(3 Units C: LH 45)**

Learning Outcomes
At the end of the course, students should be able to:
1. Understand management information system;
2. Conversant with general systems theory;
3. Understand the classification of systems and their characteristics;
4. Identify how information is retrieved; and
5. Conversant with privacy of information.

Course Contents
Definition, concepts and scope of management information systems. General systems theory. Characteristics of systems. Classification of systems. Systems relationships. Cybernetic control. Communication theory. Basic requirements of Management Information Systems. Retrieval and privacy of information. Data relating to business operations. Establishing the information needs of management. Use of computers in the management of information systems, etc.

Minimum Academic Standard
Information Resource Centre/Laboratory

IRM 325: Information Risk Management (3 Units C: LH 45)

Learning Outcomes
At the end of the course, students should be able to:
1. Understand the various types of security problems;
2. Know how to conduct risk analysis and prevent, detect and react to security incidents;
3. Know how to set up security policies;
4. Appreciate the workings of network security; and
5. Understand basic cryptography.

Course Contents
This course exposes students to the basics of information security namely various types of security problems. Risk analysis, prevention, detection and reaction to security incidents. Security policies access control. Authentication, assurance and trust. Information flow. Network security. Basic cryptography. Firewalls. E-mail security, web security etc. Legal and ethical issues in information security.

IRMA 304: Web Application Development   (3 Units C: LH 45)

Learning Outcomes

At the end of the course, students should be able to:
1. Know the Hypertext Markup Language (HTML);
2. Understand Macromedia Dreamweaver Visual design and proper organization of interactive websites;
3. Understand electronic commerce sites;
4. Understand basic web design; and
5. Understand how to conduct critical analysis of existing website design and organization.

Course Contents
The course will cover topics including; webpage design, authoring, and evaluation. The use of the Internet as an information storage system. The web application will be done with the use of Hypertext Markup Language (HTML) and WYSIWYG program such as Macromedia Dreamweaver Visual design and proper organization of interactive websites, including electronic commerce sites; software tools for creating web material; web design projects and critical analysis of existing website design and organization.

Minimum Academic Standard
Information Resource Centre/Laboratory

IRMA 308: Practical Field Work   (3 Units C: LH 45)

Learning Outcomes
At the end of the course, students should be able to:
1. Designing web-sites that fit the organization where the field trip was conducted;
2. Participated in a hiring session – where interviews were conducted and placement done;
3. Conducted critical analysis of a couple of websites designed and managed some parts of any;
4. Designed some components of security policies for an organization and participated in the process of trying to secure them; and
5. Retrieved information from numerous sources during the period of the field trip.

400 LEVEL

COURSE CODE	COURSE TITLE	STATUS	SEMESTER	
		Core/Elective	1ST	2ND
BU-GST 041	Citizenship Orientation		0	
BU-GST 042	Citizenship Orientation			0
BU - IRM 402	Marketing Information Products and Services	C		2
BU - IRM 403	Business Intelligence and Data Visualization	C	3	

BU - IRM 404	Web Design and Development	C		3
BU - IRM 407	Accounting Principles for Information Professionals	C	2	
BU-GST 440	E-Project Management and Simulation	C	1	
BU-GST 400	Religion and Social Ethics	C		3
IRM 401	Information SystemAnalysis, Design and Evaluation	C	3	
IRM 415	Legal and Ethical Issues in IRM	C	3	
IRM 429	Economics of Information	C	3	
IRM 402	Database Construction and Management	C		3
IRM 421	Managing Intellectual Capital	C	3	
IRM 490	Research Project in IRM	C		6
		TOTAL	18	17

BU- IRMA 402 Marketing Information Products and Services (2 Units; LH = 30; PH = NIL)

Learning Outcomes
On successful completion of this course, students should be able to:
1. Discuss three basic information product and service marketing techniques
2. Identify four marketing techniques relevant for information products and services
3. Analyze five digital marketing techniques
4. State three marketing processes
5. Analyze at least five information consumer behaviors
6. Review four cases of market segmentation from information industry perspective
7. Identify ten information products and services

Course Contents
Concept of marketing. Information product life cycle. Processes of marketing. Challenges of marketing in Africa and Nigeria. Concept of digital marketing. Information environment. Consumer behavior. Information product market segmentations. Marketing strategies. Target Market. Pricing strategies and promotions. Need for marketing information products and services in the third World. Marketing evaluation and review technique. Information product differentiating. Information product positioning. Marketing ethics. Digital marketing tools.

BU- IRMA 403 Business Intelligence and Data Visualization (3 Units; Core; LH=30; PH=45)

Learning Outcomes
At the end of this course, students should be able to:
1. Explain two components of Nigerian/African business environment
2. Identify at least three key business intelligent tools
3. Explain three pungent business decisions
4. Develop one business dash board using Power BI
5. Identify at least ten business information data sources
6. Describe the Excel interface

7. Interpret two business data-sets

Course Contents

Components of Nigerian/African business environment. Strategic managerial decision making. Business Intelligence. Overview of business intelligence tools. Nature and objectives of business intelligence. Working with Power BI tool. Introduction to Tableau. Data collection and sorting. Business data pre-processing. Data visualization. Business ethics. Data integrity. Critical thinking. Introduction to other modern business analytic tools. Working with Excel. Data integrity. Business information sources.

BU-IRM 404 Web Design and Development (3 Units; CORE; LH=30; PH= 45)

Learning Outcomes

On completion of the course, students should be able to:
1. Explain five benefits of web design and development for organizations
2. Distinguish between the physical and logical markup tags
3. List three types and uses of hypertext links
4. Explain five steps for creating hyperlinks
5. Design four HTML document using text editor
6. Design two web pages for information products and services
7. Develop two web pages using Visual Studio
8. Develop two web pages using Adobe Dreamweaver
9. Explain four principles in the design of user interface (UI & UX)

Course Contents

History of the Internet. History of HTML. Concept of web authoring. Concept of Web design. Hypertext Markup Language. Cascading Style Sheet utilization for web page design. Form elements in web pages. Embedding graphics in web pages. Extensible Markup Language (XML) and design of web applications. WYSIWYG and design of web applications. JavaScript functionalities for web page design. Visual Basic Script (VBScript) functionalities for web page design. Principles of user interface (UI) for web design and development. User experience (UX) principles for web design and development. Analysis of websites. Visual studio. Adobe Dreamweaver.

BU-IRMA 407 Accounting Principles for Information Professionals (2 Units; Core; LH = 30; PH = NIL)

Learning Outcomes

At the end of the course, students should be able to:
1. State five principles of accounting management for information professionals
2. Discuss three financial records for information management
3. Explain three business outcomes from past archive records
4. Review the financial position of three information organizations
5. Discuss five relevant record keeping steps in information management
6. Evaluate record errors in information resources management

Course Contents
History and development of accounting. Nature and scope of accounting. Role of accounting and uses of financial statement. Introducing statement of accounting standard. Accounting functions. Accounting procedure and systems. Basic document process. Double entry book keeping system. Trial balance. Accruals. Prepayments and adjustments. Books of prime entry and recording in the ledger. Bank reconciliation statement. Preparation of debtors and creditors Statement. Accounting for fixed assets acquisition. Depreciation. Disposal and fixed assets schedule. Extended trial balance. Correction of errors using suspense account journal. Account of a sole trader

IRM 401: Information System Analysis, Design, and Evaluation   (2 Units C: LH 30)

Learning Outcomes
At the end of the course, students should be able to:
1. Understand how modelling of system function is carried out;
2. Know the processes of computer-based information systems;
3. Appreciate how small-scale information systems are developed;
4. Understand modelling of data; and
5. Identify data that can be modelled for the benefit of small-scale systems.

Course Contents
Definition, concepts and scope of information systems. Analysis, design and evaluation. Concepts and methods of information systems design and development with particular reference to library and information center applications. Emphasis is given to modeling of system functions, data, and processes of computer-based information systems including the development of small-scale information systems.

IRM 415:   Legal and Ethical Issues In Information Resources Management
(2 Units C: LH 30)

Learning Outcomes
At the end of the course, students should be able to:
1. Know the legal and ethical issues in the use of information resources;
2. Understand intellectual property;
3. Identify specific issues related to internet and other digital media;
4. Decipher the fundamental questions of right and wrong; and
5. Distinguish between use and misuse of information, ownership of information and intellectual property rights.

Course Contents
Definition, concepts and scope of legal and ethical issues in the use of information resources; including intellectual property, and specific issues related to internet and other digital media. The fundamental questions of right and wrong. The issue of the use and misuse of information. Ownership of information. Intellectual property rights. Free or restricted access to information,

assuring privacy and confidentiality; data integrity etc. Ethical principles applied to information professional's decisions and actions ''

IRM 402: Database Construction and Management   **(3 Units C: LH 45)**

Learning Outcomes
At the end of the course, students should be able to:
1. Understand the various types of data base systems models;
2. Know how to analyse the numerous types of databases;
3. Be conversant with query languages;
4. Identify and solve database management issues; and
5. Be proficient with issues related to data integrity and security.

Course Contents
Definition, concepts and scope of database management; introduction to the database approach; File management systems; information retrieval systems and database management systems. Types of database system models; systems analysis for databases; requirement analysis, requirement specifications. System design for databases, conceptual and physical database design. Query languages; database management issues; data integrity and data security.

IRM 429: Economics of Information

IRM 421: Managing Intellectual Capital   **(3 Units C: LH 45)**

Learning Outcomes
At the end of the course, students should be able to:
1. Understand the various types of intellectual capital;
2. Know how to identify the different types of intellectual assets;
3. Create a balance between innovation and operating efficiency;
4. Know how to measure the value of intellectual capital; and
5. Understand how to protect intellectual capital.

Course Contents

Concept of intellectual capital and its management as well as its critical importance in the success of knowledge and innovation management initiatives; types of intellectual capital (human, organizational structural etc); different types of intellectual assets, how to identify intellectual assets (knowledge audit); how to visualize intellectual capital (knowledge mapping); creation of organizational memory; (tradeoff between incentives and control; capturing and codifying innovation; creating and maintaining a balance between innovation and operating efficiency). Creativity management and innovation support. How to measure the value of intellectual capital.

IRM 490: Research Project (3 Units C: PH 270)

Learning Outcomes
At the end of the course, students should be able to:
1. Formulate research questions flowing from the problem statement narration;
2. Design questionnaire or interview schedule (Adopted or adapted);
3. Administer the research instrument after the supervisor's approval;
4. Collect, collate and analysis the data;
5. Give a summary, conclusion and recommendation of the study as chapter 5; and
6. Defend the research project before the panel set by the department.

Course Contents

Students are expected to design, carry out, and present quality projects, demonstrating their knowledge and understanding of research methods. More specifically, they should be able to administer their research instruments, collect the data and analyse the data using appropriate statistical tools. All these will be in chapter 4 that carries the title: data presentation, analysis and presentation. Chapter 5 contains summary of the studies, conclusion, recommendations and suggestion for further studies. For the referencing, students are expected to strictly comply with the 6th edition of APA style. Prerequisite course is IRMA 302: Research Methods in IRM.