



# International Degree Foundation

(Year-One Programme)



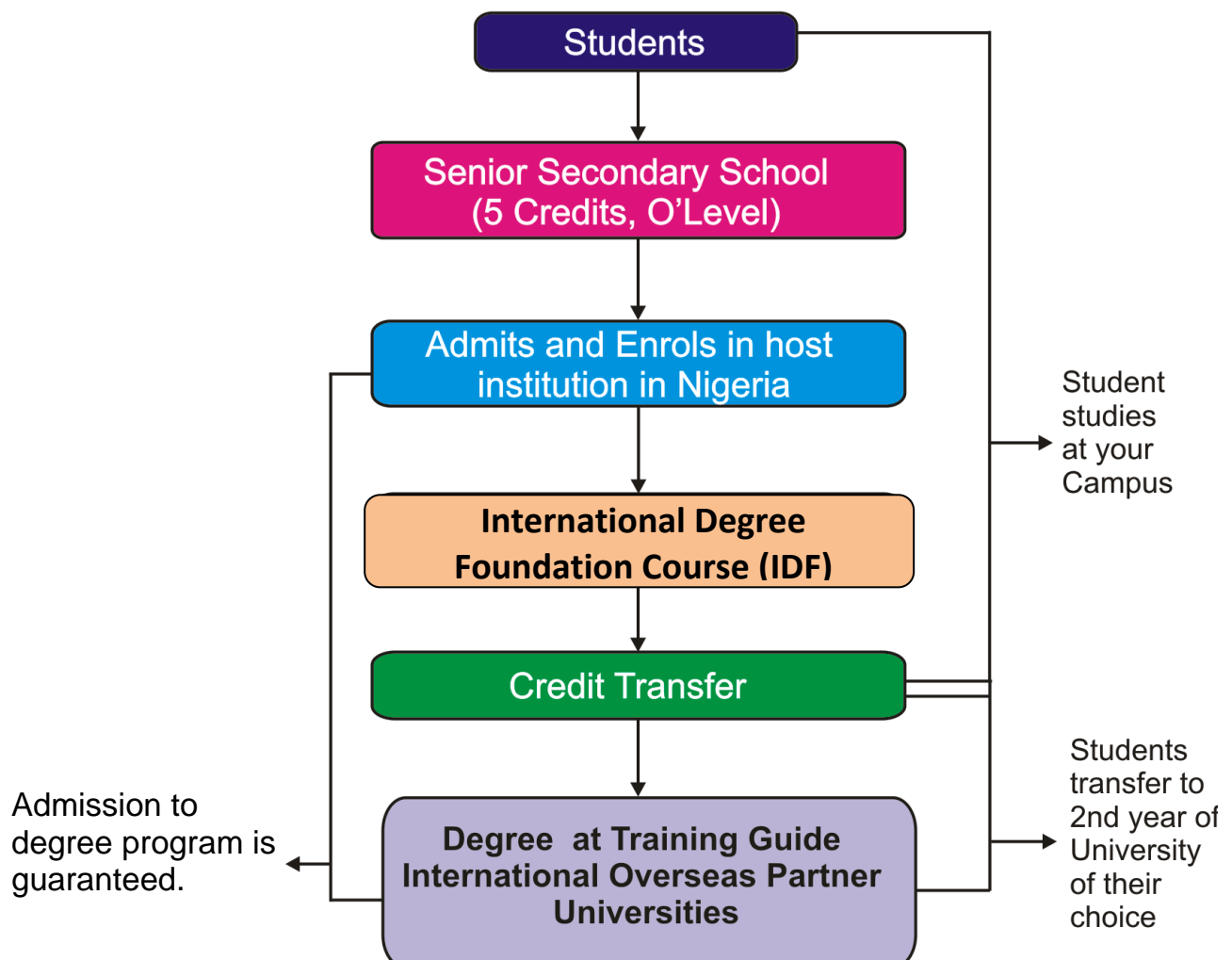
## STUDENT HANDBOOK



## GENERAL INFORMATION

International Degree Foundation is a Year-One degree programme of partner Universities in America, Europe and Asia. Student admitted into this programme will follow foreign partners' Universities' curriculum for one academic year in affiliated Universities in Nigeria under the Centre for International Education & Exchanges (CIE). Upon successful completion of program, student will be transferred to the 2nd year of our foreign partner University. Successful student has varieties of Universities and countries to choose from depending on the interest and financial ability of parents/sponsors.

## PROGRAMME CHAT



## **ADMISSION REQUIREMENTS, TERMS AND CONDITIONS**

Applicant must possess minimum of five (5) credits including English Language and Mathematics (pass in Mathematics is acceptable for law and English Literature is not compulsory), and three (3) other relevant subjects at no more than two (2) sittings. WAEC/GCE/NECO or NABTEB are acceptable and can be combined.

Applicant must not be more than twenty-six (26) years old

The curriculum for this programme is in line with our partner Universities hence applicant cannot use this programme to gain admission into any University in Nigeria. Applicant is strongly advised to have sponsor(s) and should be prepared to travel out of Nigeria to continue his/her studies at any partner University.

Applicant is not required to sit for UTME or post-UTME.

## **DURATION OF COURSES**

- |      |                         |   |   |
|------|-------------------------|---|---|
| i.   | Non-Medical Courses     | - | 2 Semesters (9 months)                            |
| ii.  | Medical Related Courses | - | 3 Semesters (12 months)                           |
| iii. | Pre-Medicine Courses    | - | 4 Semesters (1 <sup>1</sup> / <sub>2</sub> years) |

# Academic Programmes



## **ACADEMIC PROGRAMMES**

### **FACULTIES**

- Faculty of Business & Economics
- Faculty of Communication & Journalism
- Faculty of Education
- Faculty of Engineering
- Faculty of Architecture, Design & Fine Arts
- Faculty of Humanities
- Faculty of Law
- Faculty of Health Sciences
- Faculty of Applied Sciences
- Faculty of Sports & Recreation
- Faculty of Marine
- Faculty of Aviation
- Faculty of Performing Arts

### **FACULTY OF BUSINESS & ECONOMICS**

- Business Management
- Accounting
- Banking and Finance
- Economics
- Marketing
- International Business Management
- Management of Information Systems
- International Relations
- Political Science & Public Administration

### **FACULTY OF COMMUNICATION**

- Public Relations
- Journalism and Broadcasting
- Radio, Television & Cinema

## **FACULTY OF EDUCATION**

- English Language Teaching
- Computer and Instructional Technology Teaching

## **FACULTY OF ENGINEERING**

- Computer Engineering
- International Software/Computer Engineering
- Electrical-Electronics Engineering
- Electronic & Communication
- Industrial Engineering
- Civil Engineering
- Energy System Engineering
- Mechanical Engineering
- Automotive Engineering
- Aeronautical Engineering

## **FACULTY OF ARCHITECTURE, DESIGN & FINE ARTS**

- Architecture
- Graphic Design
- Interior Design
- Visual Arts (Painting)

## **FACULTY OF HUMANITIES**

- Psychology
- English Language & Literature
- Chinese Language & Literature

## **FACULTY OF LAW**

- Common Law (LLB)

## **FACULTY OF HEALTH SCIENCES**

- Health Care Management
- Biotechnology
- Occupational Therapy

- Nutrition & Dietetics
- Disaster Management
- Food Technology
- Fishing and Resource Management
- Pre-Medical (Medicine)
- Pre-Medical (Nursing)
- Pre-Medical (Pharmacy)
- Pre-Medical (Medical Laboratory)

### **SCHOOL OF APPLIED SCIENCES**

- Computer Science
- Tourism and Hospitality Management
- Gastronomy & Culinary Arts

### **SCHOOL OF SPORTS & RECREATION**

- Sports Management
- Recreation Management

### **MARINE SCHOOL**

- Logistics & Transportation
- Marine Ship Captain & Deck

### **SCHOOL OF AVIATION**

- Aviation Management
- Pilotage

### **FACULTY OF PERFORMING ARTS**

- Performing Arts (Dance)
- Theatre



## Course Description & Degree Pathway (*Brief*)



## FACULTY OF BUSINESS & ECONOMICS

### COURSES DESCRIPTION:

COURSECODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
BE 101	Introduction to Computer (Information System)	3
BE 102	Introduction to Economics	3
BE 103	National History	2
BE 104	Development of Reading Skills	3
BE 105	Introduction to Behavioural Science: Psychology	3
BE 106	Development of Writing Skills	3
BE 107	Mathematic (Business, Basic etc)	3
	<b>TOTAL</b>	<b>20</b>
<b><i>SECOND SEMESTER</i></b>		
BE 101	Principles of Accounting	3
BE 202	Introduction to Business Management	3
BE 203	Introduction to Law	3
BE 204	Statistics	3
BE 205	Introduction to Behaviour Science: Sociology	3
BE 206	Principles of Marketing	3
BE 207	Business Law	3
	<b>TOTAL</b>	<b>21</b>

***Year-One Degree for:*** ●Accounting ●Aviation Management ●Banking & Finance ●Business Management ●Economics ●International Business Management ●International Relations ●Marketing ●Management Information Systems ●Political Science & Public Administration

## FACULTY OF ENGINEERING

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
ENG 101	Introduction to Computer (Information System)	3
ENG 102	Introduction to Economics	3
ENG 103	National History I	2
ENG 104	General Chemistry	3
ENG 105	Computer Programming I	3
ENG 106	General Physics I	3
ENG 107	Calculus I	3
	<b>TOTAL</b>	<b>20</b>
<b><i>SECOND SEMESTER</i></b>		
ENG 202	Linear Algebra	3
ENG 203	National History II	2
ENG 204	Fundamentals of Industrial Engineering	3
ENG 205	Computer Programming II	4
ENG 206	General Physics II	3
ENG 207	Calculus II	3
	<b>TOTAL</b>	<b>18</b>

***Year-one degree for:*** •Computer Engineering •Civil Engineering •Electrical-Electronics Engineering •Energy systems engineering •Industrial Engineering •Aeronautical Engineering •Petroleum Engineering •Mechanical/Automobile Engineering •Software Engineering

## THE SCHOOL OF TOURISM AND HOSPITALITY MANAGEMENT

### COURSES DESCRIPTION:

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>UNIT</b>
<b>FIRST SEMESTER</b>		
THM 101	Introduction to Computer (Information System)	3
THM 102	Introduction to Economics I	3
THM 103	National History I	2
THM 104	English for THM I	3
THM 105	Statistics for Tourism	3
THM 106	Introduction to Hospitality	3
THM 107	Tourism & Hospitality Mathematic	3
	<b>TOTAL</b>	<b>20</b>
<b>SECOND SEMESTER</b>		
THM 201	Introduction to Business Management	3
THM 202	Hospitality Law	3
THM 203	National History II	2
THM 204	English for THM II	3
THM 205	Principles of Marketing	3
THM 206	Business Accounting	3
THM 207	Introduction to Economics II	3
	<b>TOTAL</b>	<b>20</b>

**Year-one degree for:** •Gastronomy & culinary arts •Tourism & Hospitality Management

## FACULTY OF EDUCATION

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
EDU 101	Introduction to Computer (Information System)	4
EDU 102	National History I	2
EDU 103	Physics I	3
EDU 104	English I	3
EDU 105	Educational Psychology	3
EDU 106	Calculus I	3
EDU 107	Research Methods	2
	<b>TOTAL</b>	<b>20</b>
<b><i>SECOND SEMESTER</i></b>		
EDU 201	Introduction to Educational Science	3
EDU 202	National History II	2
EDU 203	Physics II	3
EDU 204	English II	3
EDU 205	Special Teaching Methods	3
EDU 206	Calculus II	3
EDU 207	Teaching Principles & Methods	3
	<b>TOTAL</b>	<b>20</b>

**Year-one degree for:** •Computer and industrial Technology teaching  
 •English Language

*Teaching*

## FACULTY OF HEALTH SCIENCE

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
HS 101	Introduction to Computer I	3
HS 102	Introduction to Economics I	3
HS 103	National History I	2
HS 104	Development of Reading Skills	3
HS 105	Psychology	2
HS 106	General Accounting I	3
HS 107	Mathematic (Business, Basic etc)	2
	<b>TOTAL</b>	<b>18</b>
<b><i>SECOND SEMESTER</i></b>		
HS 201	Introduction to Computer Science II	2
HS 202	Introduction to Economic II	3
HS 203	National History II	2
HS 204	Business Law	2
HS 205	Sociology and Health	2
HS 206	General Accounting II	3
HS 207	Development of Writing Skills	3
	<b>TOTAL</b>	<b>17</b>

***Year-one degree for:*** •Health Care Management •Nutrition & Dietetics  
•Occupational Therapy

## FACULTY OF ARCHITECTURE, DESIGN AND FINE ARTS

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
ADF 101	Basic Design Studio	6
ADF 102	Architectural Drawing I	3
ADF 103	National History I	2
ADF 104	Drawing Techniques I	3
ADF 105	Environmental Control Systems	3
ADF 106	Mathematic (for Architects)	3
ADF 107	Photograph I	3
	<b>TOTAL</b>	<b>23</b>
<b><i>SECOND SEMESTER</i></b>		
ADF 202	Architectural Drawing II	3
ADF 203	National History II	2
ADF 204	Drawing Techniques II	3
ADF 205	History of Art and Culture	3
ADF 206	Building Technology I: Materials & Methods	3
ADF 207	Photograph II	3
	<b>TOTAL</b>	<b>17</b>

***Year-one degree for:*** ●Architecture Graphics Design ●Interior Design  
●Visual Arts (Painting)

## FACULTY OF COMMUNICATION

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
COM 101	Introduction to Computer (Information System) I	3
COM 102	Introduction to Economics	3
COM 103	National History I	2
COM 104	Development of Reading Skills	3
COM 105	Introduction to Behaviour Science: Psychology	3
COM 106	Development of Writing Skills	3
COM 107	Introduction to Communications	3
	<b>TOTAL</b>	<b>20</b>
<b><i>SECOND SEMESTER</i></b>		
COM 201	Introduction to Computer (Information System) II	3
COM 202	Introduction to Law	3
COM 203	National History II	2
COM 204	Introduction to Business Management I	3
COM 205	Introduction to Behaviour Science: Sociology	3
COM 206	History of Communications	3
	<b>TOTAL</b>	<b>17</b>

***Year-one degree for: •Journalism and Broadcasting •Public Relations  
•Radio Television and Cinema***

## FACULTY OF HUMANITIES

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
HUM 101	Introduction to Computer I	3
HUM 102	National History I	2
HUM 103	Development of Reading Skills I	3
HUM 104	Introduction to Behaviour Science: Psychology I	3
HUM 105	Development of Writing Skills I	3
HUM 106	Mathematics	3
	<b>TOTAL</b>	<b>17</b>
<b><i>SECOND SEMESTER</i></b>		
HUM 201	Introduction to Computer II	3
HUM 202	National History II	2
HUM 203	Development of Reading Skills II	3
HUM 204	Introduction to Behaviour Science: Psychology II	3
HUM 205	Development of Writing Skills II	3
HUM 206	Introduction to Behaviour Science: Sociology	3
	<b>TOTAL</b>	<b>17</b>

***Year-one degree for:*** •English Language and Literature •Psychology  
•Translation and Interpretation



## SCHOOL OF PHYSICAL EDUCATION AND SPORTS

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
PHY 101	Introduction to Computer (Information System) I	3
PHY 102	Introduction to Sport Science	2
PHY 103	National History I	2
PHY 104	Introduction to Recreation	3
PHY 105	Sport Psychology	3
PHY 106	Hygiene and First Aid	3
PHY 107	English I	3
	<b>TOTAL</b>	<b>19</b>
<b><i>SECOND SEMESTER</i></b>		
PHY 201	Introduction to Computer (Information System) II	3
PHY 202	Basic Law	3
PHY 203	National History II	2
PHY 204	Basic Accounting	3
PHY 205	Sport Sociology	3
PHY 206	Sport History	2
PHY 207	English II	3
	<b>TOTAL</b>	<b>19</b>

***Year-one degree for: •Recreation Management •Sport Management***

## SCHOOL OF PERFORMING ARTS

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
PA 101	Introduction to Computer (Information System)	3
PA 102	National History I	2
PA 103	Development of Reading Skills	2
PA 104	Development of Writing Skills	3
PA 105	Contemporary Dance I	3
PA 106	History of Dance I	3
PA 107	Choreography I	3
	<b>TOTAL</b>	<b>19</b>
<b><i>SECOND SEMESTER</i></b>		
PA 201	Introduction to Music	2
PA 202	National History II	2
PA 203	Tap Dance	2
PA 204	Music for Dance	2
PA 205	Contemporary Dance II	3
PA 206	History of Dance II	3
PA 207	Choreography II	3
	<b>TOTAL</b>	<b>17</b>

***Year-one degree for: •Dance***

## FACULTY OF LAW

### COURSES DESCRIPTION:

COURSE CODE	COURSE TITLE	UNIT
<b><i>FIRST SEMESTER</i></b>		
LAW 101	English Legal Method I	3
LAW 102	Constitutional and Administrative Law I	3
LAW 103	Legal Philosophy I	3
LAW 104	Law of Tort I	3
LAW 105	Communication and Study Skill I	3
LAW 106	Contract Law I	3
LAW 107	Family Law I	3
	<b>TOTAL</b>	<b>21</b>
<b><i>SECOND SEMESTER</i></b>		
LAW 201	English Legal Method II	3
LAW 202	Constitutional and Administrative Law II	3
LAW 203	Legal Philosophy II	3
LAW 204	Law of Tort II	3
LAW 205	Communication and Study Skill I	3
LAW 206	Contract Law II	3
LAW 207	Family Law II	3
	<b>TOTAL</b>	<b>21</b>

***Year-one degree for: •Common Law (LLB)***

## THE MARINE SCHOOL

### COURSES DESCRIPTION:

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>UNIT</b>
<b><i>FIRST SEMESTER</i></b>		
MS 101	Introduction to Computer (Information System) I	3
MS 102	Financial Accounting I	3
MS 103	National History I	2
MS 104	English I	3
MS 105	Mathematic I	3
MS 106	Statistics I	3
	<b>TOTAL</b>	<b>17</b>
<b><i>SECOND SEMESTER</i></b>		
MS 201	Introduction to Computer (Information System) II	3
MS 202	Financial Accounting II	3
MS 203	National History II	2
MS 204	English II	3
MS 205	Mathematic II	3
MS 206	Statistics II	3
MS 207	Introduction to Business Management	3
	<b>TOTAL</b>	<b>20</b>

***Year-one degree for: •Logistics & Transport •Marine Ship Captain & Deck***

**PRE-MEDICAL**

**(Pathway to Medicine, Nursing, Dentistry, Pharmacy, Laboratory Technology & Physiotherapy)**

**COURSES DESCRIPTION:**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>UNIT</b>
<b><i>FIRSTS SEMESTER</i></b>		
MED 101	General Biology I	6
MED 102	General Chemistry I	6
MED 103	Pre Calculus	4
MED 104	English I	6
MED 105	Physics I	6
	<b>TOTAL</b>	<b>28</b>
<b><i>SECOND SEMESTER</i></b>		
MED 201	General Biology II	6
MED 202	General Chemistry II	6
MED 203	Calculus	4
MED 204	English II	6
MED 205	Computer I	2
MED 206	General Physics II	6
	<b>TOTAL</b>	<b>30</b>
<b><i>THIRD SEMESTER</i></b>		
MED 301	Introduction to Histology and Cell Biology	6
MED 302	Introduction to Anatomy and Physiology	6
MED 303	Medical Terminology	4
MED 304	Computer II	2
MED 305	Organic Chemistry I	6
	<b>TOTAL</b>	<b>24</b>
<b><i>FOURTH SEMESTER (Medical Student only)</i></b>		
MED 401	Ethics	3
MED 402	Organic Chemistry II	6
MED 403	Psychology	3
MED 404	Cell Biology	3
	<b>TOTAL</b>	<b>15</b>

**Year-one degree for pathway to:** ●4-year Medicine (DM/MBBS) ●3-year Nursing  
 ●4-year Dentistry ●3-year Pharmacy ●3-year Laboratory Technology ●4-year Physiotherapy



# Course Outlines *(Brief)*

# COURSE OUTLINES

## FACULTY OF BUSINESS & ECONOMICS

**BE 101- Introduction to Computers & Information Systems** To provide an understanding of the need for the management of data as an organizational resource. Introduction to the fundamental concepts of data processing. Emphasis is on business data processing. Student's skills in the application of computers to business and their knowledge of hardware and software are enhanced.

**BE 102 - Introduction to Economics I** This course introduces the scope, nature and methods of economics; the economic problem, a general view of the price system consumer behaviour; theory of the firm; various market structures.

**BE 103- National History** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states 1800-2000 Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic, First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic

**BE 104 - Development of Reading Skills** The main aim of this course is to prepare students for the academic reading and writing tasks they will do within their Faculties. To this end, Students will study the techniques that will enable them to produce academic essays in a range of specific styles. They will learn how to write about graphical information and how to incorporate supporting examples into their essays. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**BE 105- Introduction to Behaviour Science** The main objective of this course is to introduce the science of Psychology, to make the students to be familiar with the

theoretical approaches in psychology and with the psychological processes as sensation, perception, consciousness memory, cognition, motivation and emotion

**BE 106 - Development of Writing Skills** The main aim of this course is to provide effective development of the skills acquired in EGL101. Students will master speaking and argumentative skills by taking part in discussions of the topics covered in the reading assignments. They will develop critical and analytical thinking at a higher level. Acquire profound knowledge of the necessary reading and writing techniques aiming to prepare them for more in depth research work with materials of their Majors. Continue to prepare students for the academic reading and writing tasks they will encounter within their Faculties. They will learn how to include secondary data within their writings. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**BE 107 – Business Mathematics** This course provides information on the basic concepts in mathematics and how these concepts are applied to business sciences. The students also gain skills on logic, judgment and application

**BE 107 - Basic Mathematics** This course will include topics such as: real numbers, definitive values, number scales, integers, coordinates, functions, limits: change ratio, tangents, differentials and differentiation, graphical presentations; maxima-minima problems, quadratic equations, matrices, double variable quadratic inequalities: two-dimensional quadratic programming, geometry.

## ***SECOND SEMESTER***

**BE 101- Principles of Accounting I** Accounting I is an introductory course, which assumes no previous knowledge of the subject. This course introduces the student to the basic tools of financial accounting such as balance sheet, income statement, worksheet, and journal & ledger accounts. The students will be able to prepare and use these in single proprietorship type of business by the end of the semester. This



course will also demonstrate how accounting concepts can be used to make business decisions more effective.

**BE 102 - Introduction to Business Management** This course is designed to introduce the environment & historical setting of business; the organisational evaluation of business enterprise, both structural & legal; differentiation of business functions and the rationalisation of business operations. Students often assume the role of a manager is not different than that of a traditional “boss”—someone who hires/fires, doles out raises/promotions, and tells employees what to do. Management takes students beyond these preconceived notions by exposing them to the full spectrum of management practices and concepts that will help them succeed as managers in today’s business world.

**BE 203 - Introduction to Law** Introduction to basic concepts of law. Legal systems, regulating activities of government & governmental agencies. An overall summary of the legal framework of the European Union.

**BE 204 - Statistics I** Statistical ideas and their relevance in practical life; preparing data for statistical analysis. Elementary probability, random variables, frequency distributions and sampling. Logic of statistical references; descriptive statistics, estimation and significance tests.

**BE 205 - Introduction to Behaviour Science: Sociology** An introduction to basic principles, definition of sociology, concepts and theories of sociology, logic and methods of sociological inquiry, analysis of social structure, the relationship of individual to society, importance and development of sociology in Europe and Turkey, main contemporary societies.

**BE 206 - Principles of Marketing** This course serves as an introduction to the basic concepts and practices of modern hospitality to students' knowledge. It will have a balance between theories-concepts and practices-applications. An integrative approach will be used to discuss the major marketing decisions hospitality marketing managers face in today's global marketplace.

**BE 207 - Business Law** Through this course, the students gain knowledge and skills on: definition of business and commercial business, their legal structures and functions; concept of valuable documents, legal specifications of contracts and their types; limits of contract rights; consumer rights and their protection; revenue law in business.

## **FACULTY OF ENGINEERING**

### **FIRST SEMESTER**

**ENG 101 - Introduction to Computers** An introduction to basic aspects of computing, operating systems, computing environments, networks and tools. This course provides a background of tools using DOS and Windows environments for word processing, spreadsheets and databases

**ENG 102 - Introduction to Economics I** The students are expected to gain knowledge and skills on theories of micro-economics and be able to do analyses in micro-economics.

**ENG 103 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states 1800-2000 Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**ENG 104 - General Chemistry** Matter and measurements; Atom, molecules and ions. Stoichiometry, the mole, mass relations in chemistry reactions; gases, kinetic

theory of gases; electronic structure and the Periodic Table, quantum numbers, energy levels and orbitals. Covalent bonding, thermo-chemistry, CALORIMETRY, bond energy, first law of thermodynamics, liquids and solids, molecular substances, phase diagrams, types of solutions, concentration units, acid-base model, water dissociation constant, pH and OH; Alkanes and alkenes, aromatic hydrocarbons and their derivatives, functional groups, synthetic organic polymers, nuclear reactions, nuclear stability and radioactivity, nuclear fission, nuclear fusion.

**ENG 105 - Computer Programming I** In this computer programming course, students learn how to solve problem using computers. The concept and notation of algorithms. Problem analysis, development of algorithms and their implementation in a procedure-oriented language. Topics include the integrated programming environment (editing, computing, debugging), data types, operators, input/output structured programming, program control, passing parameters and arrays

**ENG 106 - General Physics I** In this course classical mechanics will be introduced. Space and time: straight-line kinematics; motion in a plane; forces and equilibrium; experimental basis of Newton's laws; particle dynamics; universal gravitation; collisions and conservation laws; work and potential energy; vibrational motion; conservative forces; inertial forces and non-inertial frames; central force motions; rigid bodies and rotational dynamic topics covered in this course.

**ENG 107 - Calculus I** Real numbers, functions, and graphs; limits and continuity; the derivative and differentiation; extreme function values, techniques of graphing, and the exact differential.

## **SECOND SEMESTER**

**ENG 202 - Linear Algebra** This course deals with subjects such as system of linear equations, matrices, determinants, introduction to eigenvalues and eigenvectors, dot product, cross product, vector spaces and linear transformations.

**ENG 203 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**ENG 204 - Fundamentals of Industrial Engineering** Introduction to Industrial Engineering (IE), brief history of IE, related disciplines, production systems design, production systems control, quality control, total management, operations research, decision sciences and systems topics covered in this course.

**ENG 205 - Computer Programming II** A continuation of the development of discipline in program design, implementation and in programming style. Topics include algorithms, recursion, and classical data structures. An additional language will be introduced.

**ENG 206 - General Physics II** Introduction to electromagnetism and electrostatics: electric charge, Coulomb's Law, electric structure of matter, conductors and dielectrics. Gauss's Law, Concepts of electrostatic field and potential, electrostatic energy. Electric currents, magnetic fields and Ampere's law. Magnetic materials. Time-varying fields and Faraday's law of electromagnetic induction; magnetism and matter; basic electric circuits; AC circuits and resonance; Electromagnetic waves and Maxwell's equations.

**ENG 207 - Calculus II** The definite integral and integration; computing areas; application of the definite integral; inverse functions, and exponential functions; and inverse trigonometric functions, and hyperbolic functions. Computing anti derivative, rational functions.

## **THE SCHOOL OF TOURISM AND HOSPITALITY MANAGEMENT**

### **FIRST SEMESTER**

**THM 101 - Introduction to Computer (Information Systems):** This Course introduces the fundamental concepts of Information Technology (IT) and the necessary knowledge to use computers. The course will present the basic description on the parts of the computer systems namely hardware, software, data, procedures, and information technology standard devices used to store, input and output data and information. Students will also acquire a multitude of skills to use word processing software and World Wide Web professionally.

**THM 102 - Introduction to Economics I** This course introduces the scope, nature and methods of economics; the economic problem, a general view of the price system consumer behaviour; theory of the firm; various market structures.

**THM 103 National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**THM 104 - English for THM I** This course especially designed for the students in order to teach them hospitality language terminologies during 13 weeks. The special vocabulary requirements of the sector will be dealt and service related terminology and hospitality related examples will be used to enhanced students' understanding and communication skills in the hospitality.

**THM 105 - Statistics for Tourism** This course is especially designed for tourism students. Statistical ideas and their relevance in practical life; preparing data for statistical analysis. Elementary probability, random variables, frequency distributions and sampling. Logic of statistical references; descriptive statistics, estimation and significance tests.

**THM 106 - Introduction to Hospitality** This course takes a management perspective in introducing students to the organization and structure of hotels, restaurants, clubs, cruise ships, and casino hotels. There are chapters on business ethics, franchising, management contracts, and areas of management responsibility such as human resources, marketing and sales, and advertising.

**THM 107 - Tourism & Hospitality Maths** This is a comprehensive hospitality mathematics course, designed to provide students with the essential numeric skills required for Hospitality and Tourism management. The course content includes percentages, menu pricing, yield and price factors, profit and loss statements, algebra, simple and compound interest, hospitality and tourism statistics, and weight/volume conversions between the Imperial and Metric systems.

## ***SECOND SEMESTER***

**THM 201 - Introduction to Business Management** This course is designed to introduce the environment & historical setting of business; the organisational evaluation of business enterprise, both structural & legal; differentiation of business functions and the rationalisation of business operations. Students often assume the role of a manager is no different than that of a traditional “boss”—someone who hires/fires, doles out raises/promotions, and tells employees what to do. Management takes students beyond these preconceived notions by exposing them to the full spectrum of management practices and concepts that will help them succeed as managers in today’s business world.

**THM 202 - Hospitality Law** The course reviews all facets of the tourism industry regulations as they pertain to such areas as: tourism organization, investment and operations, the travel trade and the tourist. This course has an international perspective but a local emphasis

**THM 203 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**THM 204 - English for Tourism II** This course is designed to increase academic writing skills in the hospitality industry. It explains paragraph structure and essay structure especially communicating with different organizations such as travel agencies, tour operators, regional and international hotels. It shows how to obtain unity, coherence and meaning by using words and phrases logically. It uses both theory and practice to help the students have confidence when constructing their writing skills in the hospitality industry.

**THM 205 - Principles of Marketing** This course discusses the application of the concepts and principles of marketing to the specialized tourism and hospitality business. The 4 Ps of marketing: promotion, price, place and product will be explained to the student in relation to unique and perishable nature of the product offered, its intangibility and the need to sell most of its products "unseen" and at a distance. The approaches available for market research will be presented. Students will be guided through the steps required to effectively plan and implement a marketing strategy for a hospitality venue or leisure attraction. Advertising methods, target marketing and factors in consumer preference will be covered.

**THM 206 - Business Accounting** This course is designed to develop the knowledge of the tourism students about accounting and bookkeeping, accounting statements, the balance sheet equation, effects of transactions on the accounting equation, mechanics of double-entry accounting, the general journal, posting of transactions, trial balance, adjusting entries and preparing statements, financial analysis using accounting data to control and evaluate monetary results of business activities.

**THM 207 - Introduction to Economics II** This course provides a comprehensive, in-depth study of the business tourism market worldwide, an analysis of the relevant theoretical issues and a detailed investigation of the practice of managing and

organising 269 facilities for the business travel and tourism market. Both theoretical and practical issues are illustrated by extensive case-studies and end-of-chapter discussion questions allow students to test their knowledge and understanding.

## **FACULTY OF EDUCATION**

### ***FIRST SEMESTER***

**EDU 101 - Introduction to Computers & Information Systems** To provide an understanding of the need for the management of data as an organizational resource. Introduction to the fundamental concepts of data processing. Emphasis is on business data processing. Student's skills in the application of computers to business and their knowledge of hardware and software are enhanced

**EDU 102 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**EDU 103 - Physics I** In this course classical mechanics will be introduced. Space and time: straight-line kinematics; motion in a plane; forces and equilibrium; experimental basis of Newton's laws; particle dynamics; universal gravitation; collisions and conservation laws; work and potential energy; vibrational motion; conservative forces; inertial forces and non-inertial frames; central force motions; rigid bodies and rotational dynamic topics covered in this course.

**EDU 104 - English I** This supportive course includes the reinforcement of reading through reading selections with review of structural patterns and paragraph

**EDU 105 - Educational Psychology** Relation between education and psychology , definition of educational psychology, basic terms of learning and development(physical, psychosocial, cognitive, social , emotional and moral development) factors effecting learning (motivation, individual factors, group dynamic), different approaches of learning and their implementations in education, effective learning .



**EDU 106 - Calculus I** Sets, numbers, concepts of functions, types of functions and graphs; increasing and decreasing functions; close defined functions, one-to-one functions and one function of the reverse, trigonometric functions, limit and continuity; extreme function values, techniques of graphing and curve drawing.

**EDU 107 - Research Methods** The aim of this course is to prepare students for their individual research project or dissertation giving them the necessary tools and skills needed for the scientific, academic and methodological development of projects.

## ***SECOND SEMESTER***

**EDU 201 - Introduction to Educational Sciences** Basic educational concepts, functions of education (philosophical, social, legal, psychological, economic and political), the relation between education and other fields, historical development of education, directions in education in the new millennium, the role of teachers in education, characteristics of teachers, new practices and perspectives in teacher training

**EDU 202 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**EDU 203 - Physics II** Coulomb's law and electric field. Gauss's law and electric potential. Capacitance and electric energy. Current and resistance, energy in the circuit. Magnetic field. Faraday's law, inductance. Magnetic fields in matter waves sound.

**EDU 204 - English II** This supportive course includes the reinforcement of writing skills with review of structural patterns and paragraph and summary writing.

**EDU 205 - Special Teaching Methods I** Basic concepts specific to the teaching of these concepts and relations, of the Constitution and the legal basis of the National Education Basic Law, the general purposes of teaching, used in the methods,

techniques, tools and materials. Examination of instructional program (aim, objectives, theme, unit, activity, etc.). Course, examination and evaluation of teacher and student workbook.

**EDU 206 - Calculus II** The definite integral and integration; computing areas; application of the definite integral; inverse functions, and exponential functions; and inverse trigonometric functions, and hyperbolic functions. Computing anti derivative, rational functions.

**EDU 207 - Teaching Principles and Methods** Basic issues in teaching, learning and teaching principles, the importance of planning in teaching, planning teaching, examples of (unit-based) syllabuses and daily lesson plans, learning and teaching strategies, instructional methods and techniques and their applications, instructional tools, tasks and responsibilities of teachers in improving quality of teaching, teacher efficacy.

## **FACULTY OF HEALTH SCIENCE**

### ***FIRST SEMESTER***

**HS 101 - Introduction to Computers I** An understanding of the need for the management of data as an organizational resource. Introduction to the fundamental concepts of data processing. Students' skills in the application of computers and their knowledge of hardware and software are enhanced.

**HS 102 - Introduction to Economics I** The students are expected to gain knowledge and skills on theories of micro-economics and be able to do analyses in micro-economics.

**HS 103 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states 1800-2000 Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**HS 104 - Development of Reading Skills** The main aim of this course is to prepare students for the academic reading and writing tasks they will do within their Faculties. To this end, Students will study the techniques that will enable them to produce academic essays in a range of specific styles. They will learn how to write about graphical information and how to incorporate supporting examples into their essays. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**HS 105 - Psychology** The aim of this course is to introduce the fundamental topic, theories and branches of psychology to the students; provide the skills for an objective and scientific approach to human behaviour. In addition, basic and historical approaches in psychology, the fundamental topics of learning, motivation, social cognition, personality, sensation and perception, attention will be studied during this course.

**HS 106 - General Accounting I** Through this course, the students recognize the qualities of accounting systems and its functions; can analyze the financial tables and gain information on the financial status of businesses; can arrange general financial tables, gain application skills relevant to the content and functioning of asset accounts controlled by profit and loss accounts.

**HS 107 - Basic Mathematics** This course will include topics such as: real numbers, definitive values, number scales, integers, coordinates, functions, limits: change ratio, tangents, differentials and differentiation, graphical presentations; maxima-minima problems, quadratic equations, matrices, double variable quadratic inequalities: two-dimensional quadratic programming, geometry.

**HS 107 - Business Mathematics** This course provides information on the basic concepts in mathematics and how these concepts are applied to business sciences. The students also gain skills on logic, judgment and application.

## **SECOND SEMESTER**

**HS 201 - Introduction to Computers** Basic keyboard skills, word processing (word processing), graphics, spreadsheets, (Spreadsheets), a data base (data base), is working with programs, primary education, basic programming applications in education, educational software (Software) review, working with computers in the classroom.

**HS 202 - Introduction to Economics II** The students are expected to gain knowledge and skills on theories of macro-economics and be able to do analyses in macro-economics.

**HS 203 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**HS 204 - Business Law** Through this course, the students gain knowledge and skills on: definition of business and commercial business, their legal structures and functions; concept of valuable documents, legal specifications of contracts and their types; limits of contract rights; consumer rights and their protection; revenue law in business.

**HS 205 - Sociology and Health** This course will provide knowledge for the students on topics such as social theories, urbanization, community development, sociological disciplines and general community issues.

**HS 206 - General Accounting II** This course covers the following topics: General purpose financial statements communicating information about the business corporation's performance and position for users external to management. The course partially emphasizes how the accountant processes and presents the information and

includes exposure to recording transactions, adjusting balances and preparing financial statements for service and merchandise firms according to established rules and procedures. In addition, the course examines major elements of the statements such as cash, receivables, inventory, long-lived assets, depreciation, payroll, bonds, and other liabilities and stocks.

**HS 207 - Development of Reading Skills** The main aim of this course is to prepare students for the academic reading and writing tasks they will do within their Faculties. To this end, Students will study the techniques that will enable them to produce academic essays in a range of specific styles. They will learn how to write about graphical information and how to incorporate supporting examples into their essays. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

## **FACULTY OF ARCHITECTURE, DESIGN AND FINE ARTS**

### ***FIRST SEMESTER***

**ADF 101 - Basic Design Studio** This studio provides both a conceptual and practical introduction to design and introduces students to basic design principles, design theory and concept development. Through assignments students develop an understanding and appreciation of the design elements such as point, line, shape, form, space, texture, value and color, and design principles such as balance, proportion, emphasis, movement, pattern, repetition, rhythm, variety, harmony and unity.

**ADF 102 - Architectural Drawing I** This course deals with techniques of graphic presentation introduced as a basic language of architecture. Students work with a broad range of graphic presentation methods. Skills developed in architectural and spatial drawing. Theories of representation and the use of several visual means including free hand drawing will be covered to analyze and convey ideas regarding the environment. Fundamentals of orthographic drawing, rendering techniques and format layout examined through an array of projects.

**ADF 103 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**ADF 104 - Drawing Techniques I** The course aims to help students learn the basic skills of drawing from observation while working from still-life arrangements. The principles of contour line, line weight, value, positive and negative shape and perspective are employed to create convincing illusion and unified compositions. Through these activities, students develop technical drawing skills, acquire new conceptual approaches to drawing, and strengthen the aesthetic and expressive qualities of their work.

**ADF 105 - Environmental Control Systems** This course aims at introducing students with understanding and knowledge of impacts of built environments on people and natural environment. The course focuses on the role of spatial designer in designing buildings, building environments and interior spaces that benefit from natural resources, provide maximum comfort levels, limit environmental damage and energy consumption. The topics covered in the course are climate and climate change; bio-climatic design; comfort levels of buildings; use of natural resources and passive and active systems in heating, cooling and lighting, and water and waste management in buildings.

**ADF 106 - Mathematics for Architects** This course provides students with necessary knowledge to understand the basic mathematical concepts and principles. By such knowledge, students understanding and problem solving skills are developed to help them cope with structural design problems during their education as well as during their professional carrier.

**ADF 107 - Photography I** In this class the students explore black and white photography. Emphasis is on manipulation of film and paper in the darkroom as well as outside photographic assignments.

## ***SECOND SEMESTER***

**ADF 202 - Architectural Drawing II** This course deals with advanced knowledge and skill acquisition of the diverse categories of information delivery required by the design professionals. Architectural abstraction in drawing to communicate ideas on spatial and environmental information through perspective, isometric, oblique and axonometric drawings will be explored. Various media will be covered as means of graphic presentation.

**ADF 203 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**ADF 204 - Drawing Techniques II** Explore ways to articulate and build visual space through the various conceptual uses of drawing. Techniques range from drawing the still life to abstraction.

**ADF 205 - History of Art and Culture** This course provides students a broad understanding of the ancient, medieval, and post-renaissance world through an analysis of art and culture. This course places an emphasis on the great complexity and interconnectivity of socio-political and cultural facts and employs an anthropological view to the history of art.

**ADF 206 - Building Technology I: Materials and Methods** This course introduces students to the role of building technology in the design process. Building materials and methods of construction are studied. Students become aware of all of the materials, the construction types, the elements and the methods of the construction.

**ADF 207 - Photography II** This is a practical course, encouraging students to take pictures every week to explore intermediate techniques of exposure, development and printing of small- and medium-format black-and-white film and print materials, with special emphasis on tonal control through the creative applications. Emphasis is placed on aspects of design, composition, perception, form and content in black-and-white, colour and digital photographs.

## **FACULTY OF COMMUNICATION**

### ***FIRST SEMESTER***

**COM 101 - Introduction to Computers & Information Systems I** This Course introduces the fundamental concepts of Information Technology (IT) and the necessary knowledge to use computers. The course will present the basic description on the parts of the computer systems namely hardware, software, data, procedures, and information technology standard devices used to store, input and output data and information. Students will also acquire a multitude of skills to use word processing software and World Wide Web professionally.

**COM 102 - Introduction to Economics** This course introduces the scope, nature and methods of economics; the economic problem, a general view of the price system consumer behaviour; theory of the firm; various market structures.

**COM 103 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**COM 104 - Development of Reading Skills** The main aim of this course is to prepare students for the academic reading and writing tasks they will do within their Faculties. To this end, Students will study the techniques that will enable them to produce academic essays in a range of specific styles. They will learn how to write about graphical information and how to incorporate supporting examples into their



essays. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**COM 105 - Introduction to Behaviour Science: Psychology** The aim of this course is to introduce the fundamental topic, theories and branches of psychology to the students; provide the skills for an objective and scientific approach to human behaviour. In addition, basic and historical approaches in psychology, the fundamental topics of learning, motivation, social cognition, personality, sensation and perception, attention will be studied during this course

**COM 106 - Development of Writing Skills** The main aim of this course is to provide effective development of the skills acquired in EGL101. Students will master speaking and argumentative skills by taking part in discussions of the topics covered in the reading assignments. They will develop critical and analytical thinking at a higher level. Acquire profound knowledge of the necessary reading and writing techniques aiming to prepare them for more in depth research work with materials of their Majors. Continue to prepare students for the academic reading and writing tasks they will encounter within their Faculties. They will learn how to include secondary data within their writings. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**COM 107 - Introduction to Communications** The aim of the course is to achieve analysis of topical events through a communication view-point and promote basic concepts of communication science. The course is designed to provide students with a broad overview of the functions of communication. It will explore communication between individual people, in groups and in organizations. The purposes of mass communication will also be explored.

## **SECOND SEMESTER**

**COM 201 - Introduction to Computer (Information System) II** The main aim of this course is to help students understand the basic concepts about computers, and gain skills on how to use windows, Word, Excel, SPSS, Power Point and Internet.

**COM 202 - Introduction to Law** Introduction to basic concepts of law. Legal systems, regulating activities of government & governmental agencies. An overall summary of the legal framework of the European Union. The course also puts special emphasis on the political and administrative aspects of law.

**COM 203 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**COM 204 - Introduction to Business & Management I** Introduce business and non-business students to business areas and how they function together in a global business environment. Familiarize students with business concepts, terms and bases for global competition. Learn critical thinking skills through cases and application of concepts in real world situations. Expose students to a wide variety of business careers to facilitate student decision on appropriate business major. Relate business as a part of all future careers.

**COM 205 - Introduction to Behaviour Science: Sociology** This course aims at achieving a sound understanding of mass communication and considers the reaction it can provoke. In this context, the term of mass communication and its origins, the historical development of communication, liberal and critical approaches to mass communication, the ideological purposes and the duties of media, sociology of media, news and reality, identity and representation in the media, globalization and consumer societies, internet and its uses, media and democracy, role of women in the media are all part of this course.

**COM 206 - History of Communication** History of communications will be studied vis-à-vis culture and communications relations. Within a study of the characteristics of mass communications, issues like institutionalization – in a historical perspective -, alienation, monopolization, globalization and identity will be studied.

## **FACULTY OF HUMANITIES**

### ***FIRST SEMESTER***

**HUM 101 - Introduction to Computers** An understanding of the need for the management of data as an organizational resource. Introduction to the fundamental concepts of data processing. Students' skills in the application of computers and their knowledge of hardware and software are enhanced.

**HUM 102 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**HUM 103 - Development of Reading Skills I** The main aim of this course is to prepare students for the academic reading and writing tasks they will do within their Faculties. To this end, Students will study the techniques that will enable them to produce academic essays in a range of specific styles. They will learn how to write about graphical information and how to incorporate supporting examples into their essays. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**HUM 104 - Introduction to Psychology I** The purpose of this course is to introduce the student to the broad range of topics that are studied in the field of psychology. This course provides the student with a broad introduction to the field of psychology, one of the social sciences. Among the topics covered are gathering data on the causes and correlates of behavior, and key figures in psychology and their

theories. This survey of psychology will acquaint the student with the major concepts and terminology of the discipline and give a better understanding of self and others. In the process students will hopefully gain some insight into what makes people think, feel, and behave the way that they do.

**HUM 105 - Development of Writing Skills I** The course aims to improve the students' skills in various types of paragraph and composition writing that include explanation, comparison and contrast and cause and effect relationships.

**HUM 106 - Mathematics** The main objective of the course is to provide the mathematical background needed for psychological and psychometrical research and analyses. This course introduces students to technical communication in Psychology literature search. APA reports and presentations.

## ***SECOND SEMESTER***

**HUM 201 - Introduction to Computers II** Basic keyboard skills, word processing graphics, spreadsheets, data base working with programs, primary education, basic programming applications in education, educational software review, working with computers in the classroom .

**HUM 202 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**HUM 203 - Development of Reading Skills II** The course aims to improve the students' skills in understanding and solving authentic English texts which are structurally and semantically more complex.

**HUM 204 - Introduction to Behaviour Science: Psychology II** The course aims to improve the students' skills in understanding and solving authentic English texts which are structurally and semantically more complex.

**HUM 205 - Development of Writing Skills II** The course aims to improve the students' skills in various types of paragraph and composition writing that include explanation, comparison and contrast and cause and effect relationships.

**HUM 206 - Introduction to Behaviour Science: Sociology** This course is designed for students from other departments in order to give them a general knowledge of sociology. This course provides an introduction to basic principles, concepts and theories of sociology, place of sociology among social sciences and examination of various culture, institutions and social places.

## **SCHOOL OF PHYSICAL EDUCATION AND SPORTS**

### ***FIRST SEMESTER***

**PHY 101-Introduction to Computer (Information System) I** Information technologies, basic concepts related to software and hardware, operating systems, word processing programs, spreadsheet programs, presentation of data, internet usage in education, information technologies and their effects on social structures in education, information systems security and related ethical concepts.

**PHY 102 Introduction to Sport Sciences** Physical Education and Sports in the basic concepts, physical education and sport in education and training location, function ,objectives, philosophy, relationship with other sciences, physical education and sport, the future of vocational areas, the location and function in the Nigeria education and sports institutions.

**PHY 103 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**PHY 104 - Introduction To Recreation** This course introduces the basics of recreation industry to students. This course also provides an excellence grounding for the other courses that will be studied in subsequent years. Student develop an

understanding of the terminology, concepts and procedures used in the recreation industry.

**PHY 105 - Sport Psychology** Definition, basic concepts, purpose, development, and work areas of any kind of sport performance, affecting cognitive, emotional and personality factors, psychological training, competition, sport, group dynamics, and dynamic

**PHY 106 - Hygiene and First Aid** Personal and social importance of being healthy, factors affecting health, preventive, curative and rehabilitation health services with the general characteristics of infections, sources, transport, recognition of transmission and prevention ways. First aid definitions and objectives have to be done with the knowledge of first aid.

**PHY 107 - English I** This supportive course includes the reinforcement of reading through reading selections with review of structural patterns and paragraph.

## ***SECOND SEMESTER***

**PHY 201 - Introduction to Computers & Information Systems II** Basic keyboard skills, word processing (word processing), graphics, spreadsheets, (Spreadsheets), a data base (data base), is working with programs, primary education, basic programming applications in education, educational software (Software) review, working with computers in the classroom.

**PHY 202 - Basic Law** Information The concept of law, the necessity, the rules governing the social life of the differences between the rules of law, branches of law and sources of law, laws, rules and regulations about.

**PHY 203 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**PHY 204 - Basic Accounting** Department of Sport Management is for the students of accounting concepts, accounting techniques and financial statements of the course is to achieve information on these issues.

**PHY 205 - Sociology of Sport** Sport sociology, basic concepts, development, relation with other sciences, the social and economic factors that encourage sport, fitness - training relationship, as a leisure activity, sports, social mobility through sport, urbanization, amateurism, industrialization during the sport, the social nature of sporting activities.

**PHY 206 - Sports History** The meaning and importance of physical education and sports history, the historical development of physical education and sport in the world and the Nigeria's, sports history, the sport's history sources.

**PHY 207 - English II** This supportive course includes the reinforcement of writing skills with review of structural patterns and paragraph and summary writing.

## **SCHOOL OF PERFORMING ARTS**

### ***FIRST SEMESTER***

**PA 101 - Introduction to Computers & Information Systems** To provide an understanding of the need for the management of data as an organizational resource. Introduction to the fundamental concepts of data processing. Emphasis is on business data processing. Student's skills in the application of computers to business and their knowledge of hardware and software are enhanced.

**PA 102 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**PA 103 - Development of Reading Skills** The main aim of this course is to prepare students for the academic reading and writing tasks they will do within their Faculties. To this end, Students will study the techniques that will enable them to produce academic essays in a range of specific styles. They will learn how to write about graphical information and how to incorporate supporting examples into their essays. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**PA 104 - Development of Writing Skills** The main aim of this course is to provide effective development of the skills acquired in PA 103. Students will master speaking and argumentative skills by taking part in discussions of the topics covered in the reading assignments. They will develop critical and analytical thinking at a higher level. Acquire profound knowledge of the necessary reading and writing techniques aiming to prepare them for more in depth research work with materials of their Majors. Continue to prepare students for the academic reading and writing tasks they will encounter within their Faculties. They will learn how to include secondary data within their writings. They will also develop reading speed and proficiency, increase vocabulary and improve comprehension skills.

**PA 105 - Contemporary Dance I** This course introduces the basics of modern dance technique and aesthetics. Dance styles taught will be derivations of major twentieth century modern dance techniques.



**PA 106 - History of Dance I** This course will look at performance genres from the early 1900's with the origin of modern dance to the present, including contemporary dance theatre, performance art, multi-media performance and street dancing.

**PA 107 - Choreography I** Studies geared to develop an understanding of the principles of choreography.

## ***SECOND SEMESTER***

**PA 201 - Introduction to Music** Exploration of the music in sounds. Emphasis is given on the development of music literacy in reading and writing music. It provides an opportunity on listening, understanding, enjoying and appreciating music.

**PA 202 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**PA 203 - Tap Dance / Folk Dance** Tap Dance: Simple key techniques, basic exercises, and movements. Variety of rhythmic patterns, fundamental steps, and graded routines. Brief history, choreographic principles, and improvisation. Shuffles, ball changes, heel drops, time steps, flaps, and beginning turns are introduced.

**PA 204 - Music for Dance** Introduction to meter, rhythm and music notation. Rhythmic analysis of scores and movement sequences as well as finding common ground between music and dance through notation will be the main focus. Experimentation with music and movement collaborations will be encouraged.

**PA 206 - Contemporary Dance II** This course builds upon the basic skills and aesthetic of modern dance through higher-level technique, creative studies and more complicated movement phrases.

**PA 207 - Choreography II** Studies geared to develop an understanding of the principles of choreographic invention for a single person, small groups and large ensembles. A continuation of Choreography I.

## **FACULTY OF LAW**

### ***FIRST SEMESTER***

**LAW 101 - English Legal and Method I** The concept of law; classification of the law; sources of law, including Parliament, the courts and the European Community; the structure of the court system; jurisdiction of the courts both civil and criminal; Appeals in civil and criminal cases; statutory interpretation:-canons of construction and aids to interpretation; the operation of the doctrine of precedent:- theoretical foundations, and the doctrine as applied in individual courts; civil procedure.

**LAW 102 - Constitutional Law & Administrative Law I** The nature of constitutions; the nature and sources of British Constitutional law; conventions; the sovereignty of Parliament; European Community law and domestic law. The House of Commons; the House of Lords; Parliamentary privilege; the Royal Prerogative; The Executive; Delegated legislation; local government; the protection of fundamental human rights; civil rights and freedoms- freedom of the person; freedom of expression; freedom of assembly and association.

**LAW 103 - Legal Philosophy I** Morality and the law; theories of punishment-discuss the advantages of each of the following theories (a) deterrence (b) incapacitation (c)rehabilitation (d)just dessert; war crimes; types of punishment; (1 )community service orders (2) probation.

**LAW 104 - Law of Torts I** Historical background and general principles of liability; negligence - duty of care, standard of care; causation and remoteness of damage; nervous shock; occupiers liability; contributory negligence, damages.

**LAW 105 - Communication & Study Skills I** Learning effective study skills, time management. Constructing Letters, Presentations, Debates and Interviews.

**LAW 106 - Law of Contract I** Introduction; offer and acceptance; termination of offer; certainty of terms; consideration –basic principles; part payment of debts and promissory estoppel; intention to create legal relations; contractual terms; exclusion and limitation clauses; unfair contract terms act unfair terms regulations.

**LAW 107 - Family Law I** This course will examine marriage, dissolution of marriage, nullity of marriage, separation, legitimacy and legitimating of children, custody, guardianship, maintenance and adoption of children, as provided under legislation, common law and equity and custom.

## ***SECOND SEMESTER***

**LAW 201 - English Legal System and Method II** Introduction to the jury system; Legal personnel ; The Judiciary; Appeals; Unmet legal need and funding legal advice and assistance; Alternative Dispute Resolution (ADR).

**LAW 202 - Constitutional & Administrative Law II** Nature, scope and sources of administrative agencies and procedure, relationship between administrative law, the rule of law, separation of powers and delegation of powers; Delegated legislation: its nature, forms, making and control thereof Judicial review of administrative action - principles; remedies; tribunals and inquiries; parliamentary commissioner for administration and others; the legal liability of the Crown and local authorities.

**LAW 203 - Legal Philosophy II** Introduction to legal theory; jurisprudence; what constitutes a valid legal system; legal positivism- is there a moral justification for law; legal principles; natural law.

**LAW 204 - Law of Torts II** Trespass to the person and Wikinson v Downton; Trespass to land; nuisance; Rylands v Fletcher and fire; Defamation; malicious falsehood.

**LAW 205 - Communication & Study Skills II** The students will learn the factors that work towards effective Communication with others. Much of this course focuses on the application of this knowledge to lawyer-client relationships.

**LAW 206 - Contract Law II** Misrepresentation; misrepresentation Act 1967; Mistake- common mistake; mutual mistake; unilateral mistake non est factum; duress; undue influence illegality contract in restraint of trade; discharge by frustration; discharge by agreement; performance; breach; remedies: damages, injunction restitution.

**LAW 207 - Family Law II** The course will consider distribution of income and property between family members, and the recognition of overseas orders and decrees relating to family.

## **THE MARINE SCHOOL**

### ***FIRST SEMESTER***

**MS 101 - Introduction to Computers & Information Systems I** This Course introduces the fundamental concepts of Information Technology (IT) and the necessary knowledge to use computers. The course will present the basic description on the parts of the computer systems namely hardware, software, data, procedures, and information technology standard devices used to store, input and output data and information. Students will also acquire a multitude of skills to use word processing software and World Wide Web professionally.

**MS 102 - Financial Accounting I** Accounting and bookkeeping, accounting

statements, the balance sheet equation, effects of transactions on the accounting equation, mechanics of double-entry accounting, the general journal, posting of transactions, trial balance, adjusting entries and preparing statements, financial analysis using accounting data to control and evaluate monetary results of business activities.

**MS 103 - National History I** Early history, Yoruba, Igbo states, Early states before 1500, Oyo and Benin, Hausa states, De-colonial states, 1800-2000, Savanna states, Akwa Akpa, A British sphere of influence, Independence, First Republic.

**MS 104 -English I** This supportive course includes the reinforcement of reading through reading selections with review of structural patterns and paragraph.

**MS 105 - Mathematics I** Revision of essential algebra for calculus. Polynomials, rational expressions, straight line. Linear and quadratic equations and inequalities. Functions; limits; continuity; derivatives: techniques of derivatives; applications of derivatives.

**MS 106 - Statistics I** Concepts of measurements in social sciences; descriptive and inferential statistics; correlation, regression and analysis of variance techniques; hypothesis testing; non-parametric tests of significance.

***SECOND SEMESTER***

**MS 201 - Introduction to Computers & Information Systems II** Basic keyboard skills, word processing (word processing), graphics, spreadsheets, (Spreadsheets), a data base (data base), is working with programs, primary education, basic

programming applications in education, educational software (Software) review, working with computers in the classroom .

**MS 202 - Financial Accounting II** Accounting for short and long-term assets, liabilities, payroll accounting, partnership and corporation accounting and some emphasis on cost accounting.

**MS 203 - National History II** First period of military rule, Second Republic, The abortive Third Republic, Sani Abacha, Abubakar's transition to civilian rule Fourth Republic.

**MS 204 - English II** This supportive course includes the reinforcement of writing skills with review of structural patterns and paragraph and summary writing.

**MS 205 - Mathematics II** Exponential and logarithmic functions. Derivatives of exponential and logarithmic functions. Applications of exponential functions and derivatives. Techniques of integration, definite integral, applications of integration. Functions of several variables, partial derivatives.

**MS 206 - Statistics II** An instructional and application based practical approach to the statistical package for social sciences (SPSS) program.

**MS 207 - Introduction to Business Management** This course is designed to introduce the environment & historical setting of business; the organisational evaluation of business enterprise, both structural & legal; differentiation of business functions and the rationalisation of business operations. Students often assume the role of a manager is no different than that of a traditional “boss”—someone who hires/fires, doles out raises/promotions, and tells employees what to do. Management takes students beyond these preconceived notions by exposing them to the full spectrum of management practices and concepts that will help them succeed as managers in today’s business world.

## **PRE-MEDICAL**

**(Pathway to Medicine, Nursing, Dentistry, Pharmacy, Laboratory Technology & Physiotherapy)**

### ***FIRSTS SEMESTER***

#### **MED 101 - General Biology I:**

An Introduction to Life on Earth , Atoms, Molecules and Life, Biological Molecules.

Cell Structure and Functions, Cell Membrane Structure and Functions.

Energy Flow in the Life of a Cell , Capturing Solar Energy: Photosynthesis, Harvesting Energy: Glycolysis and Cellular Respiration. DNA: The Molecule of Heredity, Gene Expression and Regulation. The Continuity of Life: Cellular Reproduction and Patterns of Inheritance. Biotechnology, Patterns of Inheritance, Principles of Evolution, How Organisms Evolve, The Origin of Species, The History of Life, Systematics: Seeking Order Amidst Diversity , The Diversity of Prokaryotes and Viruses, The Diversity of Protists , The Diversity of Plants, The Diversity of Fungi , Animal Diversity I: Invertebrates, Animal Diversity II: Vertebrates.

#### **MED 102 - General Chemistry I:**

Carbon Compounds and Chem. Bonds: Lewis Structures, Representative carbon Compounds: Functional groups, Organic reactions: Acids & Bases, Organic reactions: Acids & Bases, Alkanes: Nomenclature, Synthesis , Stereo Chemistry: Chiral Molecules,

Ionic Reactions: Nucleophilic Substitution & Elimination Reactions of Alkyl Halides , E – Z system for multiple elemental Hydrocarbons.

#### **MED 103 - Pre Calculus:**

FUNDAMENTALS; FUNDAMENTALS , FUNCTIONS - Increasing and Decreasing Functions; Average Rate of Change, Transformations of Functions - Quadratic Functions; Maxima and Minima, Modeling with Functions. EXPONENTIAL AND LOGARITHMIC FUNCTIONS - Exponential Function - Logarithmic Function - Laws of

Logarithms - Exponential and Logarithmic Equations - Modeling with Exponential and logarithmic Functions. TRIGONOMETRIC FUNCTIONS OF REAL NUMBERS - Unit Circle - Trigonometric Functions of Real Numbers - Trigonometric Graphs - Trigonometry of Right Angle. TRIGONOMETRIC FUNCTIONS OF ANGLES - Trigonometric Functions of Angles - The Laws of Sines - The Laws of Cosines PROBLEM SOLVING, ANALYTIC TRIGONOMETRY - Trigonometric identities ,POLAR COORDINATES AND VECTOR- Vectors - The Dot Product -Problem solving, SYSTEMS OF EQUATIONS AND INEQUALITIES - System of Equations - Systems of Linear Equations in Two Variables - System of Inequalities, TOPICS ON ANALYTIC GEOMETRY -Parabolas -Ellipses - Hyperbolas , SEQUENCES AND SERIES - Sequences and Summation Notation - Arithmetic Sequences - Geometric Sequences -Problem Solving.

### **MED 104 - English I:**

Introduction to Course & to Presentations , 1st key paragraph technique , 1st paragraph written, 2nd & 3rd Paragraph Techniques , Write First 2 of 8 Remaining paragraphs, Write 2 paragraphs, Student talks Write 2 paragraphs, Student talks, Write 2 paragraphs, Student talks, Introduction to: One rule writing and short presentations, analyzing the parts of a sentence, student talks, analyzing the parts of a sentence, combining cores, student talks, subject control techniques, student talks.

Advanced Subject/Core Control Techniques, Writing Paragraphs. Using the Organizing Template , Choosing your topic & thesis, starting your research - Research, Writing & Slide Preparations, Drafts of Presentation Due; Rehearsals. Student Talks, Student Talks, Prepare for presentation #2; Draft Due, Student Talks, Research and Write Process Paper, Draft Due end of Class, Rewrite Process Paper, Rewrite Due end of class, Research & Write Comparison Paper, Draft due end of class. Rewrite Comparison Paper. Rewrite Due end of Class , Write Definition Paper.



**MED 105 - Physics I:**

Introduction to physics, Areas of Physics, mathematical concepts ,Trigonometry, Scalars & Vectors quantities/ Addition of vectors in one dimension, addition of vectors in two dimension/ the component method. Applications & Review/ Kinematic in one dimension: Position, Distance, velocity and acceleration. Freely Falling Bodies/ Gravity, Kinematic in two dimensions: Velocity, Acceleration, projective motion, relative velocity, Applications Inertia, Mass. The 3 Laws of Motion ( Newton's) Applications & Review, Gravitational Force, Normal Force, Frictional Force , Tension/ Equilibrium Applications & Review, Dynamics of circular uniform motion/ centripetal acceleration, centripetal force, work & energy theorem/ KE, GPE , work & energy theorem/ conservation of ME/ power , other forms of energy. Conservation of ME/ Review , Work done by a variable force/ Applications , Impulse & Momentum , Rotational Kinematics and Dynamics , Simple Harmonic Motion , Fluids/ Fluid Equations, Quiz/ Temperature & Heat , Thermal Expansion , Concepts & Review , The Ideal Gas Law, Thermodynamics, Waves and Sounds.

**SECOND SEMESTER****MED 201 - General Biology II:**

Course Introduction ,Plant Anatomy and Physiology: Plant Anatomy and Nutrient Transport, Plant Reproduction and Development ,Plant Responses to the Environment, Animal Anatomy and Physiology: Homeostasis and the Organization of the Animal Body, Respiration, Nutrition and Digestion, The Urinary System, Immunity: Defenses against Disease, Chemical Control of the Animal Body: The Endocrine System, Action and Support: The Muscles and Skeletons, The Nervous System and the Senses, Animal Reproduction, Animal Development, Behavior and Ecology: Animal Behaviour, Population Growth and Regulation, Community Interactions, How do Ecosystems work?, Earth's Diverse Ecosystems

## **MED 202 - General Chemistry II:**

Chemical Kinetics , Principles of Chemical Equilibrium, Acid & Bases, Acid & Bases, Additional Aspects of Acid-Base Equilibria, Solubility and Complex-Ion Equilibria, Spontaneous Change: Entropy and Free Energy, Spontaneous Change: Entropy and Free Energy, Electrochemistry , Chemistry of the Main-Group Elements I: Groups 1,2,13 & 14, Chemistry of the Main-Group Elements II: Groups 18,17,16,15 & Hydrogen, The Transition Elements, Complex Ions & Coordination Compounds , Clear Chemistry , Organic Chemistry, Chemistry of the Living State.

## **MED 203 – Calculus:**

A Preview of Calculus, The Tangent and Velocity Problems, The Limit of a Function, Calculating Limits Using the Limit Laws, Tangents, Velocities and Other Rates Change, Derivations, The Derivatives as function, Derivative of Polynomials and Exponential Functions, The Product and Quotients Rules, Derivatives of Trigonometric Functions, The Chain Rule, Implicit Differentiation, Derivatives of Logarithmic Functions, Applications of Differentiation: Maximum and Minimum Values, The Mean Value Theorem, optimization Problems, Anti-derivatives Intergrals, The Definite Integral, The Fundamental Theorem of calculus, The Substitution Rule, Applications of Integration: between Curves, Volumes, Techniques of Integration, Integration by Parts, Trigonometric Integrals, Trigonometric Substitution, Further Applications of Integration: Arc Length, Area of Surface of Revolution, Applications to Economic and Biology, Probability Differential Equations, Linear Differential Equations, Partial Derivatives, Multiple Integrals, Double Integrals, Application of Double Integrals, Surface Area, Triple Integrals.

## **MED 204 - English II:**

Readings, Intersex, Culture Clash, Intersex & Ethnic, Methodology in a study of a Black Culture and Breast Cencer, Race Profiling & Evolution, Reading & Correspondence, Critical Thinking

## **MED 205 - Computer I :**

Introducing Computer Systems, Interacting with Your Computer, Seeing, Hearing and Printing Data, Processing Data, Storing Data, Using Operating Systems, Networks, Presenting the Internet, Working in the Online World, Working With Application Software.

## **MED 206 - General Physics II:**

The Principle of Linear Superposition, Constructive & Destructive Interference of sound Waves: Concepts & Calculations, The Origin of Electricity, Coulomb's Law: Concepts & Calculation, Potentials Energy, Capacitors and Dielectrics: Concepts & Calculations, Ohm's Law, Resistance and Resistivity, Circuits Wired Partially in Series and Partially in Parallel, Safety and the Physiological Effects of Current: Concepts & Calculation, Magnetics Fields, The Mass Spectrometer, Ampere's Law: Concepts & Calculations, Electromagnetic Induction, Lenz's Law, Transformers, Capacitors & Capacitive Reactance, Resonance in Electric Circuits: Concepts & Calculations, The Nature of Electromagnetic Waves, The Speed of Light, Polarization: Concepts & Calculations, The Reflection of Light: Mirror, Wave Fronts & Rays, The mirror Equation and the Magnification Equation: Concepts & Calculations, The Index of Refractions, Lenses in Combination: Concepts & Calculations, Interference and the Wave Nature of Light: The Principle of Linear Superposition Diffraction: Concepts & Calculations, The Postulates of Special Relativity, The Wave – Particle Duality, The Nature of the Atom, Nuclear Physics and Radioactivity, Ionizing Radiation, Nuclear Energy, and Elementary Particles Review.

## ***THIRD SEMESTER***

## **MED 301 - Introduction to Histology and Cell Biology:**

Introduction to Histology, Microscope, Cell Nucleus, Epithelium, Connective tissue & adipose tissue, Cartilage, Bone, Nerve tissue, Muscle tissue, Blood, Skin Epidermis, Dermis, Nail & Hair, Glands of Skin, Tongue & Pharynx, Tooth, Esophagus & Stomach, Small intestine & Glands, Large Intestine, Organs Associated with digestive tract Respiratory System & Nasal Cavity, Para Nasal sinuses and nasopharynx, Larynx &

Trachea, Bronchial tree & alveoli, Introduction Urinary System & Kidneys, Bladder and Passages Circulatory System, Histology Lab, Review of Cell, Epithelium, Connective tissue and Cartilage, Review of Bone, Nerve, Muscle, Blood, Circulatory System, Review of Skin & Urinary System, Digestive System & Respiratory System.

### **MED 302 - Introduction to Anatomy and Physiology:**

Introduction, Organization of Body, Skin and its appendages, Anatomy of Cells, Physiology of Cells, Articulations, Anatomy of Muscular System, Physiology of Muscular System, Nervous System Cells, Central Nervous System, Peripheral nerves system, Sense organs, Endocrine system, Blood, Anatomy of the cardiovascular system, Physiology of Cardiovascular System, Lymphatic System, Immune System, Stress, Anatomy of Respiration, Physiology of Respiratory System, Anatomy of Digestive System, Physiology of Digestive System, Nutrition and Metabolism, Urinary System, Fluids and Electrolytes Balance, Acid base Balance, Male Reproductive System, Female Reproductive System, Growth and Development, Genetics and Hereditary.

### **MED 303 - Medical Terminology:**

Introduction to the course, Word-Building Rules, Whole Body Terminology, The Integumentary System, The Skeletal System, Muscles and Joints, The Nervous System, The Blood and Lymphatic System, The Cardiovascular System, The Respiratory System, The Digestive System, The Endocrine System, Special Senses, The Urinary System, The Male Reproductive System, The Female Reproductive System, Obstetrics, Child Health, Radiology and Diagnostic Imaging, Oncology (Cancer Medicine), Pharmacology, Mental Health, Gerontology.

### **MED 304 - Computer II:**

Database Management, Software Programming & Development, Protecting Your Privacy, Your Computer, and Your Data, Social Issues: Computer and Society, Computer Crime and Society, Privacy, Applications, Application of the learned concepts.

### **MED 305 - Organic Chemistry I:**

Carbon Compounds and Chemical Bonds: Lewis Structures, Representative carbon Compounds: Functional groups, Organic reactions: Acids & Bases, Alkanes: Nomenclature, Synthesis, Ionic Reactions: Nucleophilic Substitution & Elimination Reactions of Alkyl Halides, E – Z System for Multiple Elemental Hydrocarbons.

### ***FOURTH SEMESTER***

#### ***(Medical Student only)***

### **MED 401 – Ethics:**

First Class, Study Period, Autonomy, Competence, and Capacity, Quiz on Introduction, Jerome Groopman, M.D., How Doctors Think, Informed Consent and Malpractice, Informed Consent and Capacity, End of Life Issues, The Doctor and Society, Doctor/Doctor Relationships, Reproductive Issues, The Doctor/Patient, Reportable Illness, HIV – Related Issues, STDs, Confidentiality and Medical Records, Organ and Tissue Donation, Experimentation, Famous Cases.

### **MED 402 - Organic Chemistry II:**

Conjugated Unsaturated Systems, Aromatic Compounds, Reactions of Aromatic Compounds, Aldehydes and Ketones I. Nucleophilic Addition, Aldehydes and Ketones II. Aldol Reactions, Synthesis and Reactions of  $\beta$  – Dicarbonyl Compounds: More Chemistry of Enolate Ions, Amines, Phenols and Aryl Halides: Nucleophilic Aromatic Substitution, Carbohydrates, Lipids, Amino Acids and Proteins, Nucleic Acids and Protein Synthesis.

### **MED 403 – Psychology:**

Studying (Intro), Brain & Pain, Memory, Research, Intelligence & Statistics, Consciousness Learning, Stress & Health, Personality, Psychological Disorders, Motivation & Emotion, Sexuality & Gender, Learning Intelligence, Language, Disorders

### **MED 404 - Cell Biology:**

Introduction to Cells, Chemical Components of Cells, Energy, Catalysis, and Biosynthesis, Protein Structure and Function, DNA and Chromosomes, DNA Replication,

Repair and Recombination, From DNA to Protein: How Cells Read the Genome, Control of Gene Expression, How Genes and Genomes Evolve, Manipulating Genes and Cells, Membrane Structure, Membrane Transport, How Cells Obtain Energy from Food, Energy Generation in Mitochondria and Chloroplasts, Intracellular Compartments and Transport, Cell Communication, Cytoskeleton, Cell – Cycle Control and Cell Death 1, Cell Division, Genetics, Meiosis, and the Molecular Basis of Heredity, Tissues and Cancer.