

ECONOMICS



Student Handbook

PAN-ATLANTIC UNIVERSITY SCHOOL OF MANAGEMENT AND SOCIAL SCIENCES DEPARTMENT OF ECONOMICS

Mission Statement of the University

The Mission Statement of the University is: "to form competent and committed professionals and encourage them to serve with personal initiative and social responsibility the community in which they work, thereby helping to build a better society in Nigeria and Africa at large."

Principal Officers of the University

1. Vice-Chancellor

<u>Prof. Enase Okonedo</u> B.Sc., M.B.A., D.B.A.; FCA

2. Registrar

Mr. Kingsley Ukaoha B.Agric.Tech, MBA

3. Chief Operating Officer Dr Peter Bamkole

MBA, Ph.D.

4. Dean, Lagos Business School

<u>Chris Ogbechie</u> BEng., M.B.A., Ph.D.

5. Dean, School of Media & Communication

Dr Ikechukwu Obiaya

BA, MA, PhD.

6. **Director, Enterprise Development Centre Mrs Nneka Okekaru**

BSC, MBA

7. Dean, School of Management and Social Sciences

Dr Sola Oni BSC, MSC, Ph.D.

8. Dean, School of Science and Technology

<u>Dr Darlington Agholor</u> BSC, MSC, Ph.D.

9. **Director, Institute of Humanities**

<u>Dr Adaora Onaga</u> MMBS, PhD.

10. Bursar

Mr. Donatus Ikechukwu Ogbuike HND, MBA

Pan-Atlantic University School of Management and Social Sciences Department of Economics Staff List

S/N	Name	Designation	Mode of Engagement	Qualifications	Areas of Specialization
1	Dr. Friday Anetor	Senior Lecturer	Full- Time	BSc, MSc, PhD	Development Economics and Quantitative Economics
2	Prof. Perekunah B. Eregha	Professor	Full- Time	BSc., Dip, MSc., PhD	Applied Econometrics and Economic Theory
3	Dr. Emeka Osuji	Associate Professor	Full- Time	BSc, MSc, MPhil, LLB, BL, PhD	Economic Theory and International Economics
4	Prof. S. A. Tella	Professor	Part-Time	OD, Dip, BSc, MSc, PhD	Economic Theory and Monetary Economics
5	Prof. Aderoju Oyefusi	Professor	Part-Time	BSc, MSc, PhD	Political Economics, Energy and Environmental Economics, and Quantitative Economics
6	Dr. Ekundayo Peter Mesagan	Senior Lecturer	Full-Time	BSc, MSc, PhD	Energy and Environmental Economics and Quantitative Economics
7	Dr. Evans Olaniyi	Senior Lecturer	Full-Time	BSc, MSc, PhD	Digital Economics and Quantitative Economics
8	Dr. Stanley Nwani	Senior Lecturer	Full-Time	BSc, MSc, PhD	Health and Environmental Economics.
9	Dr. Hope Agbonrofo	Fellow	Full-Time	BSc, MSc, PhD	Monetary Economics, Development Economics, Macroeconomics Theory
10	Dr. Faith Iyoha	Lecturer I	Full-Time	BSc, MSc, PhD	Public Sector Economics, Monetary Economics, International Economics
11	Mr. Godwin Uddin	Lecturer II	Full-Time	BSc. MSc	International Economics, Development Economics
12	Mr. Julius Ujah	Graduate Assistant	Full-Time	BSc.	International Economics,

					Development Economics. Environmental Economics
13.	Dr Elvis Ozegbe	Adjunct	Adjunct Lecturer	BSc, MSc, PhD	Governance, Development Economics, International Economics

B.Sc. Economics

Overview

Economics is primarily referred to as a social science which deals with human behaviour in relation to management of scarce resources with the ultimate aim of achieving optimum outcomes. More than that, Economics subject matter cuts across Social Science courses, as well as Administration and Management disciplines. Hence, students in those disciplines do take economics courses just as economics students are encouraged to take courses outside the department and particularly in Accounting, Business Administration, Finance, Political Science and Sociology. It is therefore not unusual to find such courses as compulsory or required in the curriculum of Economics discipline.

The major aspect of the programme, apart from the philosophy and objectives is also the Course Contents. The content is selected within the context of three core areas of importance in Economics viz: Economic Theories, Mathematics/Econometrics and Economic policies. The courses relating to these areas are made compulsory so that graduates of the discipline are generally well grounded in those areas such that they are able to perform effectively as economists on graduation. This will invariably make each Economics graduate not only a good social scientist, an administrator or an advisor but also, expectedly, a good manager of human and non-human resources and globally competitive.

Philosophy

The philosophy and mission statement underlying the Economics programmes of Nigerian Universities is to produce graduates equipped with critical skills and abilities to: abstract using simplified models that identify the essence of a problem; analyse and reason - both deductively and inductively; marshal evidence, assimilate structure and analyse qualitative and quantitative data; communicate concisely the results to a wide audience, including those with no training in Economics; think critically about the limits of one's analysis in a broader socio-economic context; draw economic policy inferences and to recognise the potential constraints in their implementation.

Objectives

The objectives of the B.Sc. Economics are:

- 1. provide training in the principles of economics and their application appropriate to the type of degree concerned: single, joint and combined studies;
- stimulate students intellectually through the study of economics and to lead them to appreciate its application to a range of problems and its relevance in a variety of contexts;
- 3. provide a firm foundation of knowledge about the workings of an economy and to develop the relevant skills for the constructive use of that knowledge in a range of settings;
- 4. develop in students the ability to apply the analytical tools, knowledge and skills acquired to the solution of societies' economic problems;

- 5. equip students with appropriate tools of analysis to tackle issues and problems of economic policy;
- 6. develop in students, through the study of economics, a range of transferable skills that will be of value in employment and self-employment;
- 7. provide students with analytical skills and the ability to develop simplified frameworks for studying the real world;
- 8. provide students with the knowledge and skill base, from which they can proceed to further studies in economics, related areas or in inter-disciplinary areas that involve economics; and
- 9. generate in students, an appreciation of the economic dimensions of wider social and political issues.

Employability skills

A graduate of Economics should possess the following aptitude:

- 1. ability to create job(s) in a variety of areas of production and services;
- 2. manage a mix of human and non-human resources to achieve optimum output;
- 3. ability to survive in work environment of diverse or multifaceted production mix;
- 4. ability to offer advice to management of his/her workplace within the context of the production domain;
- 5. engage in training and consultancy services in areas of primary, secondary and tertiary sectors of the economy; and
- 6. ability to interpret government economic policy and offer desirable advise wherever required.

21st Century skills

The 21st-century skills expectations of the programme are:

- 1. scientific literacy and understanding of relevant mathematical and statistical techniques in the context of current global treatment of economic issues;
- research skills and application of analytical methods of both theory and model-based issues;
 innovation skills and appreciation of the history and development of economic ideas and the differing methods of analysis that have been and are used by economists;
- 3. economic literacy including the ability to relate differences in economic policy recommendations to differences in the theoretical and empirical features of the economic analysis, which underlie such recommendations;
- 4. critical thinking and ability to apply core economic theory and economic reasoning to applied topics;
- 5. global awareness and ability to discuss and analyse government policy and to assess the performance of national and other economies; and
- 6. oral and written communication including understanding the verbal, graphical, mathematical and econometric representation of economic ideas and analysis, as well as the relationship between them which is the current global trend.

Unique features

The unique features of the programme are:

- 1. the courses are conceived and taught within the context of global application of theories;
- 2. students are made to understand that the structures of economies are different in terms of nature, value orientation, judgement, and level of development;
- 3. at the higher levels, the basic micro and macroeconomic theories are to be taught with applications to developing and emerging economies; and
- 4. ability to analyse and discuss global economic issues, particularly with respect to developing and emerging economies.

Admission and Graduation Requirements

Admission requirements

For a four –year programme:

In addition to UTME score, the candidate should possess a Senior School Certificate with at least five credit passes, at not more than two sittings including Mathematics, English Language, and Economics.

For the three-year programme: candidates shall possess five SSC credits. In addition, to acceptable passes in at least two social science subjects including Economics at Advanced Level, provided that such passes are not counted at both levels of the examination. For emphasis, credit passes in English Language, Mathematics and Economics or any other social science subject are compulsory.

Graduation requirements

To graduate with B.Sc. Economics, students must have:

- 1. obtained 120 units for candidates who entered the university through UTME;
- 2. obtained 90 units for candidates who entered the university through direct entry;
- 3. passed all compulsory courses in the programme and required courses;
- 4. spent minimum of eight semesters and maximum of twelve semesters for UTME candidates;
- 5. spent minimum of six semesters and maximum of ten semesters for direct entry students, and
- 6. fulfilled other university and faculty requirements for graduation with bachelors degree.

Global Course Structure

Course Code	Course Title	Units	Status	LH	PH
GST 111	Communication Skills in English	2	С	15	45
GST 112	Nigerian Peoples and Culture	2	С	30	-
ECO 101	Principles of Economics I	2	С	30	-
ECO 103	Introductory Mathematics I	2	С	30	-
ECO 102	Principles of Economics II	2	С	30	-
ECO 104	Introductory Mathematics II	2	С	30	-
PAU-ECO 105	Principles of Accounting I	3	С	45	-
PAU-ECO 106	Introduction to Money and Banking	2	С	30	-
PAU-ECO 107	Introduction to Business I	2	С	30	-
PAU-ECO 108	Principles of Accounting II	3	С	45	-
PAU-ECO 109	Introduction to Finance I	2	С	30	-
PAU-ECO 110	Introduction to Business II	2	С	30	-
PAU-ECO 112	Introduction to Finance II	2	С	30	-
PAU-ECO 191	Introduction to Christian Theology	2	R	30	-
	Total	30			

Course Code	Course Title	Units	Status	LH	PH
GST 212	Philosophy, Logic and Human Existence	2	С	30	-
ENT 211	Entrepreneurship and Innovation	2	С	30	-
SSC 202	Introduction to Computer and its Application	3	С	45	-
ECO 201	Introduction to Microeconomics I	2	С	30	-
ECO 203	Introduction to Macroeconomics I	2	С	30	-
ECO 205	Structure of the Nigerian Economy	2	С	30	ı
ECO 207	Mathematics for Economists	2	С	30	ı
ECO 202	Introduction to Microeconomics II	2	С	30	-
ECO 204	Introduction to Macroeconomics II	2	С	30	ı
ECO 206	Statistics for Economists	2	С	30	ı
PAU-ECO 208	Labour Economics	2	R	30	ı
PAU-ECO 209	Introduction to Statistics	3	С	45	ı
PAU-ECO 292	The Nature of Human Beings	2	R	30	-
PAU-ECO 291	English for Business Purposes	2	R	30	-
	Total	30			

Course Code	Course Title	Units	Status	LH	PH
GST 312	Peace and Conflict Resolution	2	С	30	ı
ENT 312	Venture Creation	2	С	15	45
ECO 301	Intermediate Microeconomics I	2	С	30	-
ECO 303	Intermediate Macroeconomics I	2	С	30	-
ECO 305	History of Economic Thought	2	С	30	Ī
ECO 307	Project Evaluation	3	С	30	45
ECO 302	Intermediate Microeconomics II	2	С	30	-
ECO 304	Intermediate Macroeconomics II	2	С	30	-
ECO 306	Introductory Econometrics	3	С	30	45
ECO 310	Public Sector Economics	2	С	30	-
SSC 301	Innovation in the Social Sciences	2	С	30	-
SSC 302	Research Method I	2	С	30	-
PAU-ECO 311	Development Economics	2	R	30	-
PAU-ECO 312	Data Science for Social Scientist	2	С	15	45
PAU-ECO 313	International Trade Theory and Policy	2	Е	30	ı
PAU-ECO 314	Business Ethics	2	С	30	-
PAU-ECO 315	Artificial Intelligence	2	С	15	45
PAU-ECO 316	Data Management	2	С	15	45
PAU-ECO 317	Public Policy and Analysis	2	R	30	-
PAU-ECO 318	International Finance	2	Е	30	-
PAU-ECO 320	Advanced Mathematical Economics	2	Е	30	-
PAU-ECO 392	Professional and Personal Skills	2	R	30	-
_	Total	46			

Course Code	Course Title	Units	Status	LH	PH
ECO 401	Advanced Microeconomics I	2	С	30	
ECO 403	Advanced Macroeconomics I	2	С	30	
ECO 405	Economic Planning	3	С	45	
ECO 407	Fiscal Policy and Analysis	3	С	45	
ECO 402	Advanced Microeconomics II	2	С	30	
ECO 404	Advanced Macroeconomics II	2	С	30	
ECO 406	Monetary Theory and Policy	3	С	45	
ECO 499	Research Project/Original Essay	6	С	-	270
SSC 401	Research Method II	2	С	30	
PAU-ECO 408	Operations Research	2	E	30	1
PAU-ECO 409	Internship	3	С	-	135
PAU-ECO 410	Industrial Economics	2	R	30	-
PAU-ECO 411	Political Economy	2	R	30	-
PAU-ECO 413	Advanced Econometrics	2	E	15	45
PAU-ECO 415	Petroleum & Energy Economics	2	Е	30	-
	Total	38			

Pan-Atlantic University B.Sc. Economics

Course Contents and Learning Outcomes

100 Level

GST 111: Communication Skills in English (2 Units C: LH 15; PH 45)

Learning Outcomes

At the end of this course, the 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

The sound patterns in English Language will be considered. These will include vowels and consonants, phonetics and phonology). In addition, the English word classes (lexical and grammatical words, definitions, forms, functions, usages, collocations) will be considered. Thereafter, the course will examine the nature of the sentence in English especially in terms of its types such as simple, complex and compound sentences. Besides, the structure and function of the different types will be examined. The course will equally examine the issue of grammar and usage especially in relation to the subjects of tense, mood, modality and concord, and the aspects of language use in everyday life. Moreover, the course will focus on the important subjects of logical, critical thinking, and reasoning methods. Under this category the discussion will dwell on the issues of logic and syllogism, inductive and deductive arguments and reasoning methods, analogy, generalisation and explanations, ethical considerations, copyright rules and infringements. There will practical activities which will involve sufficient writing activities including, pre-writing, writing, post writing, editing and proofreading, brainstorming, outlining, paragraphing, types of writing, summary, essays, letter, curriculum vitae, report writing, note making and mechanics of writing. The last part of the course will examine the nature of comprehension strategies such as reading and types of reading, comprehension skills including the 3RsQ. The discussion will be extended to the subject of information and communication technology in modern language learning. Thus, the language skills for effective communication will be examined. This will involve a consideration of the major word formation processes. Writing and reading comprehension strategies will be considered. The skills required for meaningful presentation, and the art of public speaking and report writing.

GST 112: Nigerian Peoples and Culture (2 Units C: LH 30)

Learning Outcomes

At the end of the course, the 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 selfreliance (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; Reorientation 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.

ECO 101: Principles of Economics I (2 Units C: LH 30)

Learning Outcomes

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

- 1. identify the basic concepts in economics including scarcity, choice and scale of preference; basic laws of demand and supply;
- 2. explain the nature of elasticity and its applications, as well as short and long run production functions; and
- 3. discuss pricing of factors of production and market structure consisting of perfect competitive market and imperfect competitive markets.

Course Contents

An introduction to the nature of economic science and its basic problem of scarcity and choice. The methodology of economics and major areas of specialization. Historical development of ideas from the classical, neoclassical, utilitarian and welfare economists. Major findings in the various areas of specialization and elementary principles of microeconomics, as well as partial equilibrium analysis. Demand and Supply; and their laws. Determinants and types in statement and graphical format. The firms and production functions, as well as market structure.

ECO 103: Introductory Mathematics I (2 Units C: LH 30)

Learning Outcomes

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

- discuss the roles of mathematics in social sciences, particularly in economics and basic mathematics concepts in relation to modern mathematics such as set theory, factors and logarithms; and
- 2. explain the basic concepts in advanced level mathematics with reference to algebra and trigonometric functions which are useful tools in investigating economic issues.

Course Contents

The course begins with mathematical concepts in the social sciences. Gradual focus on Set theory. Factors and exponents. Logarithms. Trigonometry. Different types of equations as well as functions and progressions. Other topics include: Co-ordinate geometry, Trigonometric functions and their inverse. Inequalities, Matrix algebra, and differentiation.

ECO 102: Principles of Economics II (2 Units C: LH 30)

Learning Outcomes

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

- discuss the basic concept of functions, index numbers and dependent and independent variables in functions, as well as national income accounting;
- 2. examine circular flow of income with simple two-sector model, and
- 3. explain elementary issues on consumption, savings, investment, and, government's revenue, expenditure and roles of domestic money and foreign exchange

Course Contents

Treatment of Functions, Index numbers, variables and functional relationships. Basic concept of national income accounting. The circular flow of income, withdrawals and injections. National Income determination and analysis. Introduction to consumption, savings and investments. Elementary understanding of government activities: taxation and government expenditure; money and the banking system. Aggregate supply, unemployment and inflation. The basic terminology in external economy such as exchange rates, balance of payment and global interdependence.

ECO 104: Introductory Mathematics II (2 Units C: LH 30)

Learning Outcomes

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

- 1. identify the roles and importance of mathematics in economics;
- 2. translate economic statements to mathematical formulation and explain mathematical formulation in economic terms; and
- 3. discuss the roles of matrices and algebra in representation of economic statements and solving simple economic concepts in the range of introductory economics.

Course Contents

The derivatives of trigonometric functions, sequences and series, and expansions. Partial and total derivatives. Maxima and minima. Linear algebra. Matrix algebra. Simultaneous linear equations. Treatment of mathematical relationships and analysis with respect to basic theories of economics. The use of simple algebra and graphical tools in explaining economic statements and concepts.

PAU-ECO-105 Principles of Accounting 1 (3 units, Core; LH=45)

Senate-approved relevance

Graduates who are extremely trained and well-informed in principles of accounting is in accord with PAU's vision to form competent and committed professionals in producing economics graduates for the Nigerian environment which is assumed to be one the largest economy in the future with huge financial transactions and challenges. Relevance is seen in economics graduates from PAU being able to use accounting concepts and conventions to make optimal decisions concerning the management of their organization's financial resources.

Overview

The sourcing and management of financial resources is the fundamental responsibility of financial managers. This highlights the need for economics graduates to possess a basic knowledge of accounting. In order to be able to make proper financing, investment, and dividend decisions, financial managers need to be able to account for and analyze accounting data since it serves as the raw material for these decisions.

In this course, the economics students are taken through the different stages in the accounting process, namely; identifying, recording, classifying, summarizing, presenting, and analyzing/interpreting financial transactions. The course will require taking students through the documents involved at each stage of the accounting processes above. In this course, the economics students will be introduced to some accounting standards (particularly IAS 1, which relates to the preparation of simple financial statements).

Objectives

The objectives of the course are to:

- 1. describe the nature and scope of accounting;
- 2. describe the concepts of bookkeeping and accounting;
- 3. explain the objectives of financial accounting;
- 4. classify the various branches of accounting and explain the methods of recording accounting data using manual and electronic devices;
- 5. describe basic accounting records from primary books to extraction of trial balance;
- 6. illustrate basic posting errors and their correction;
- 7. explain bank reconciliation statements; and
- 8. describe and illustrate the preparation of a simple financial statement.

Learning Outcomes

On completion of the course, students should be able to:

- 1. identify and explain 5 scopes of accounting;
- 2. compare and contrast bookkeeping and accounting;
- 3. state 4 objectives of financial accounting;
- 4. describe various branches of accounting, and analyze the methods of recording accounting data using manual and electronic devices;
- 5. prepare basic accounting records from primary books to extraction of trial balance;
- 6. identify 5 basic posting errors and their corrections;
- 7. prepare bank reconciliation statements; and
- 8. prepare simple financial statement.

Course content

The Nature and scope of accounting. Purpose of Accounting. Difference between bookkeeping and accounting. Accounting Function. Objectives of financial accounting. Financial accounting cycle. Branches of accounting. Methods of recording accounting data using manual and electronic devices. Book-keeping and accounting. Source documents. Accounting Equation. Subsidiary books (journals and cashbooks). Double-Entry Principle. The accounting equation. Ledger accounts. Trial balance. Correction of errors and use of suspense account. Classification of expenditure between capital and revenue. Bank reconciliation statement. IAS 1 - Introduction to simple financial statements.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 106 Introduction to Money and Banking (2 Units, Core; LH = 30)

Senate-approved Relevance

Graduates who have received extensive training and knowledge in the basics of money and banking are in line with PAU's vision to produce competent and dedicated professionals for the Nigerian environment, which is anticipated to be one of the largest economies in the future with significant financial transactions and activities. Relevance can be demonstrated in PAU economics graduates' capacity to employ the ethical principles of banking, such as honesty, accountability, social responsibility, justice, and a sense of service to mankind, in order to promote economic growth and inclusivity.

Overview

The exciting field of money and banking has a direct impact on the prosperity of individuals, the actions of businesses, and the effectiveness of our economy. Money is linked to changes in economic factors that affect the state of the economy, such as interest rates, business cycles, and inflation. As a result, it is crucial to understand its dynamics as well as how monetary policy is implemented. Since banks are the biggest financial intermediaries in our economy and the ones with which the average person interacts most frequently, they should be the subject of the most thorough study Banks and other financial institutions act as a conduit for money from those who might not be able to use it productively to those who can, and as such, they are essential to increasing the economy's efficiency.

The course is an introduction to money and banking. It is geared toward students interested in macroeconomic management and banking careers. Key topics in the theory and practice of money and banking policy are covered in the course. The analysis of money and financial intermediation is the first step, with a special emphasis on how banking have changed over time, and formalizing the core elements of their operations. After that, the course moves on to more general topics like exposing the student to different bank product offerings and instruments, the objectives and fundamental tenets of bank lending, and professionalism and ethics in banking. The treatment of money theories in the course takes an elementary approach. Additionally, the students are exposed to monetary policy and the operations of global financial institutions.

Objectives

The objectives of the course are to:

- 1. describe the concept, nature, evolution and role of money in the modern economy;
- 2. state the concept of banking; discuss the structure of the banking industry with focus on the roles of the various banking institutions and their contributions to economic development;
- 3. describe different bank product offerings such as current, savings and time deposit accounts, overdrafts, term loans, syndicated loans, bankers' acceptance, letters of credit, bank quarantees and performance bonds;
- 4. state objectives and principles of bank lending;
- 5. describe issues of professionalism and ethics in banking;
- 6. explain basic theoretical models of money Keynesian and Classical approach to money demand, money supply;
- 7. describe issues of inflation, conduct of monetary policy by the Central Bank; and
- 8. describe the operations of some international monetary institutions like the World Bank, International Monetary Fund (IMF) and African Development Bank (AFDB).

Learning Outcomes

On completion of the course, students should be able to:

- 1. explain the concept, nature, evolution and functions of money in the modern economy;
- 2. illustrate the structure of the banking industry, the roles of the banking institutions and
- 1. contributions to development of the banking industry;
- 2. compare and contrast the features of different bank products such as current, savings and
- 3. fixed deposit account, letters of credit, bank quarantee;
- 4. demonstrate a good understanding of the objectives and principles of lending;

- 5. evaluate issues of professionalism and ethics in banking;
- 6. explain the theories of money and their practical implications;
- 7. explain the concept, measurement, effect and control of inflation and discuss the conduct
- 8. of monetary policy by the Central Bank; and
- 9. describe 5 roles of international monetary institutions.

Course Contents

The rationale for studying money and banking. The concept, origin and evolution of money. The essential attributes and role of money in a modern economy. Concept, origin and evolution of banking. Types of banking systems. Banking institutions - their roles and relevance to economic development. Fractional reserve and money creation by the banking system. Bank products and instruments — current, savings and time deposit accounts, overdrafts, term loans, bankers acceptance, letters of credit, bank guarantees. Objectives and principles of bank lending. Professionalism and ethics in banking. The theory of money — liquidity preference, quantity theory of money. Money supply. Inflation — concept, measurement, types, effect and control. Meaning and objectives of monetary policy. The instruments of monetary policy. The World Bank and its operations. The International Monetary Fund (IMF) and its operations. The African Development Bank (AFDB) and its operations.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 107: Introduction to Business I (2 Units, Core; LH =30) Senate Approved Relevance

Graduates with extensive training and knowledge in business fundamentals are consistent with PAU's vision to produce qualified and committed professionals for the Nigerian environment, which is anticipated to be one of the largest economies in the future with a sizeable volume of business transactions and activities. The ability of PAU economics graduates to establish and run a commercial enterprise in order to create employment possibilities for the teaming Nigerian youth can serve as evidence of relevance.

Overview

The goal of this course is to provide a thorough foundation on the nature, scope, and purpose of business. The course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

This course is designed to expose students to various ways of running a business: building necessary qualities and skills, choosing the most appropriate legal form of ownership, interacting appropriately with the environment, arriving at good decisions, practicing the principles of business ethics and observing best practices in matters of corporate governance

Objectives

The objectives of the course are to:

- 1. describe the nature and objectives of business;
- 2. identify the qualities of a good businessman/woman;
- 3. describe to students on the various legal forms of business;
- 4. explain the various types of business environment;
- 5. describe the nature and the manifestations of corporate social responsibility as well as business ethics;
- 6. explain to students on the nature and benefits of good corporate governance; and
- 7. describe to students' case studies to engage in problem solving in matters of best practices.

Learning Outcomes

On completion of the course, students should be able to:

- 1. explain the meaning of business, its objectives and requirements for success;
- 2. identify 5 general qualities of a good businessman;
- 3. choose an appropriate legal form for the business they have in mind;
- 4. identify the various stakeholders and state their expectations from the business;
- 5. explain the classification of the business environment and the techniques organisations adopt to interact effectively with their environment;
- 6. describe 7 manifestations of corporate social responsibility and business ethics;
- 7. state 6 guidelines for ethical compliance and explain ethical practices peculiar to business and accounting;
- 8. explain the benefits of good corporate governance and the problems it encounters in Nigeria; and
- 9. explain 5 importance of best practices, compliance as well as the consequences of non-compliance.

Course Contents

The meaning of business; the need for business. Resources of business. Objectives of business. Classification of business, Reasons for business failure. Importance of profit in business. Requirements for success in modern business. General qualities of a good businessman. Legal forms of business ownership. Business stakeholders and their expectations from business. Business environment. Classification of the organization environment, the general environment; the task environment; and the internal environment, techniques that organisations adopt to interact effectively with its environment. Corporate social responsibility. Business ethics, and corporate governance. Nature of social responsibility, dynamics of social responsibility, reasons for and against corporate social responsibility. Ethical issues in business and why some managers behave unethically, guidelines for ethical compliance, ethical practices peculiar to accounting profession, possible sanctions for breach of ethical compliance in accounting profession. Corporate governance, benefits of corporate governance, pre-requisite of effective corporate governance in Nigeria. Problems of corporate governance in Nigeria. Codes of best practices in corporate governance in Nigeria, compliance, effects and sanctions.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 108 Principles of Accounting II (3 Units, Core; LH =45)

Senate-approved relevance

Graduates who have received extensive training and knowledge in accounting principles are in line with PAU's mission to develop capable and dedicated professionals in order to produce economists for the Nigerian environment, which is anticipated to be one of the largest economies in the future with significant financial transactions and challenges. PAU economics graduates demonstrate relevance by using accounting principles and conventions to decide how best to handle the financial resources of their firm.

Overview

The sourcing and management of financial resources is the fundamental responsibility of financial managers. This highlights the need for economics graduates to possess a basic knowledge of accounting. In order to be able to make proper financing, investment, and dividend decisions, financial managers need to be able to account for and analyse accounting data since it serves as the raw material for these decisions.

In this course, our economics students will be introduced to the IAS/IFRS accounting standards and the evolution of accounting regulatory bodies. The students will be taken through some unique circumstances associated with each of the accounting stages will also be addressed (e.g., accounting for manufacturing companies, accounting for non-profit organizations, etc.).

Objectives

The objectives of the course are to:

- 1. describe accounting and other information systems;
- 2. explain the conceptual framework for financial reporting;
- 3. explain the users and uses of financial statements/reports;
- 4. explain the fundamental concepts and conventions in financial accounting to financial report preparation;
- 5. describe accounting errors and how to correct them;
- 6. illustrate suspense accounts and their uses;
- 7. explain control accounts:
- 8. discuss not-for-profit organisations; and
- 9. explain single entry and incomplete records.

Learning Outcomes

Upon completion of the course, students should be able to

- 1. explain the linkage between accounting and other information systems;
- 2. define the conceptual framework for financial reporting;
- 3. identify 5 users and uses of financial statements/reports;
- 4. evaluate the fundamental concepts and conventions in financial accounting to financial report preparation;
- 5. list 6 types of accounting errors and how to correct them;
- 6. explain suspense accounts and their uses;
- 7. prepare control accounts;

- 8. prepare accounts for not-for-profit organizations; and
- 9. differentiate between single entry and incomplete records.

Course content

Accounting information system within the organization. Limitations of accounting information. Elements, users and uses, qualitative characteristics of useful accounting information. Accounting concepts and conventions. Introduction to the IASB framework for the preparation and presentation of financial statements. Accounting concepts and conventions. Correction of errors. Suspense account. Control accounts. Uses of control account. Self-balancing ledgers and their uses. Incomplete records. Single-entry book-keeping. Accounting for non-profit organizations. IAS 1 - preparation of trading, profit or loss account, and statement of financial position of a sole trader. Adjustments to the final accounts of a sole trader (accruals, prepayments, etc.). Manufacturing account. Departmental Account. Analysis of simple financial statements using financial ratios. Introduction to the evolution of accounting bodies and standards (NASB, FRCN, IASC, IASB, SAS, IAS, and IFRS).

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 109 Introduction to Finance 1 (2 Units, Core; LH = 30)

Senate-approved relevance

The goal of Pan-Atlantic University is to create competent, devoted professionals who are inspired to serve their communities with initiative and social responsibility. This will improve society in Nigeria and throughout Africa. The course makes sure that economics graduates are able to apply the fundamental theories and principles of finance in order to solve actual financial problems, in keeping with the university's goal. The need for economics graduates who can work in financial management positions demonstrates the course's importance. With the help of this course, economics graduates will be better prepared to choose investments, dividends, and financing strategies that will maximize their wealth.

Overview

Introduction to finance 1 is a course that combines the knowledge of statistics, economics, and accounting. As part of the course, students will be exposed to the evolution of finance as a discipline, the roles of a finance person in an organisation, and how decisions made in the areas of finance affect the wealth of the shareholders. The course prepares the graduate of the university for careers as a financial advisor, investment banker, portfolio advisor, and financial analyst.

The focus of this course is to expose students to the rudiment of finance and ensure a great deal of understanding of topics such as the nature and scope of finance, objectives, and decisions in financial management, the time value of money, and financial arithmetic. Students will be exposed to capital structure, the risk-return trade-off of a single asset, the basics of capital budgeting, and sources of finance.

Objectives

The objectives of the course are to:

- 1. explain the meaning and evolution of finance;
- 2. explain the scope of finance and the duties of the finance manager;
- 3. describe the financial management environment;
- 4. describe the objectives of the firm and the decisions financial managers often make in carrying out their tasks;
- 5. illustrates the concept of the time value of money and sources of finance;
- 6. analyze the basic principles of capital budgeting; and
- 7. explain the concept of capital structure and risk-return trade-off for a single asset.

Learning Outcomes

On completion of the course, students should be able to:

- 1. define the meaning of finance and explain the evolution of finance;
- 2. state and explain 4 scopes of finance;
- 3. explain at least 5 duties of a finance manager;
- 4. state and explain the environmental factors affecting financial management
- 5. identify 5 key objectives of the firm;
- 6. state and explain the concept of time value of money and capital structure; and
- 7. list 3 categories of sources of finance and explain the basics of capital budgeting.

Course Content

Meaning of finance. Evolution of finance. Discipline related to finance. Environmental factors affecting financial management. Objectives of the firm. Decision in finance. Time value of money. Simple and compound interest. Present and future value of annuity. Application of time value of money in solving financial problems. Capital structure. Theories of capital structure: Net income theory, Net operating income theory and Traditional theory. Risk-return trade-off. Measurement of return and risk of a single assets. Investment decisions. Techniques of capital budgeting: non-discounted cash flow method. Sources of finance.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 110: Introduction to Business II (2 Units, Core; LH =30)

Senate Approved Relevance

The goal of PAU is to produce qualified and committed professionals for the Nigerian environment, which is anticipated to be one of the largest economies in the future with a sizeable volume of business transactions and activities. This vision is consistent with graduates who have received extensive business training and knowledge. The ability of PAU economics graduates to offer top-notch services in the functional areas of human resources, production, marketing, finance, research & development, business law, as well as purchasing, provides evidence of applicability.

Overview

This course will expose economics students to business terminology, concepts, and current business practices. It fosters critical and analytical thinking, and will refine students' business decision-making skills. Students will acquire these skills throughout the course by simulating today's workplace. The course focus on multicultural aspects of markets and business. It

examines how the business model other countries adopt often reflect their most salient characteristics.

The goal of this course is to provide students with deep insights into the various functional areas of a business: Human Resources, Production, Marketing and Finance. Other aspects will also be covered, such as Research & Development, business law, purchasing etc..

Objectives

The objectives of the course are to:

- 1. describe the various functional areas of business;
- 2. explain the functional area that contributes to the overall performance of the business;
- 3. explain the importance of the purchasing function and the good administration of materials to produce the best goods/services at an appropriate price;
- 4. describe the role of Research & Development to promote innovation;
- 5. explain the importance of banking and insurance in business activity;
- 6. describe the importance of doing business within the framework of the law;
- 7. describe international business; and
- 8. describe case studies so they can see how what they learn works out in practice, and engage in problem solving and decision making

Learning Outcomes

On completion of the course, students should be able to:

- explain the activities carried out in the departments of Human Resources, Production, Marketing and Accounting/Finance;
- 2. identify 6 key contributions of each function to the success of the organization;
- 3. explain how banks can help businesses to thrive;
- 4. explain the role of insurance in business;
- 5. apply the role of Research & Development in making a business innovative;
- 6. explain the importance of the purchasing function and of good administration of materials;
- 7. explain the importance of abiding by the law in doing business; and
- 8. describe 5 pros and cons of international business.

Course Contents

The various functional areas of business. Human resources management; defining human resources management, meaning of human resources management, components of human resources management, functions of human resources management, human resources planning and its processes, recruitment, selection and placement. Job analysis, job design and job specification, training and development. Performance appraisal, methods and the criteria for effective performance appraisal. Wage and salary administration, components of wage and salary, objectives of wage and salary administration, principles of wage and salary administration, components of wage and salary administration. Employee discipline: meaning and its features, objectives of discipline and causes of indiscipline in an organisation. Industrial and labour relations. Collective bargaining, grievance and dispute settlement procedures in an organisation. Production function; defining production, objectives of production, defining production management, factors to consider in plant location, functions of production management. Plant layout, objectives of plant layout, principles of plant layout, factors that can influence plant layout. Production systems and their features. Marketing function; defining marketing, evolution of marketing management, functions of marketing, marketing segmentation, marketing mix using the 4Ps of marketing, and extended 7Ps of marketing. Finance and accounting functions; meaning of finance, meaning of financial markets. Money

market. Capital market. Role of participants in the money market. Functions of money and capital markets. Purpose and importance of accounting function, and structure of an accounting department in a typical organisation. Insurance. Banking. Research & development. Industrial relations. Purchasing and material management. Business law and international business.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO-112 Introduction to Finance 11 (2 Units, Core; LH = 30)

Senate-approved relevance

In order to assist create a better society in Nigeria and throughout Africa, Pan-Atlantic University's objective is to develop competent, dedicated professionals and inspire them to serve their communities with self-initiative and social responsibility. The course makes ensuring that economics graduates are capable of using the basic concepts and theories of finance to address actual financial issues, in keeping with the university's goal. The need for economics graduates who can fill financial management responsibilities demonstrates the significance of the discipline. This course prepares economics graduates to make decisions on dividends, investments, and financing that maximize wealth.

Overview

Introduction to finance II is a course that combines the knowledge of statistics, finance, economics, and accounting. As part of the course, students will be exposed to how to measure return and risk of two assets, basics of merger and acquisitions and what corporate restructuring and reorganisation entails. The course prepares the graduate of the university for careers as a financial advisor, investment banker, portfolio advisor, and financial analyst.

The focus of this course is to expose students to the following the areas in financial management such as risk and return of two assets, break-even analysis, leverage, mergers and acquisitions, corporate restructuring and reorganization. Students will also be exposed to cost of capital and financial market.

Objectives

The objectives of the course are to:

- 1. describe the meaning and basics of portfolio management;
- 2. explain how the return and risk of portfolio (two-assets) is measured;
- 3. describe break-even analysis and its limitations;
- 4. describe the term leverage and its categories;
- 5. explain the term cost of capital and factors affecting the firm cost of capital;
- 6. analyze the basic of mergers and acquisitions; and
- 7. explain the term corporate restructuring and reorganization.

Learning Outcomes

On completion of the course, students should be able to:

- 1. define the term portfolio management and state five stages in portfolio management process;
- 2. state how portfolio return and risk for two assets case is measure;
- 3. compute break-even quantity and sales; and also highlight 4 assumptions of Break-even analysis;
- 4. compare and contrast the various types leverage and state how to compute them;
- 5. illustrate how to compute the cost of equity, cost of debt; cost of retained earnings, cost of preference and overall cost of capital;
- 6. state 5 objectives of merger and acquisition and 4 highlight the corporate issues that might arise in mergers and acquisitions; and
- 7. describe the reasons for corporate reconstruction and reorganisation and explain the various methods of business reorganisation a firm can adopt.

Course Content

Meaning and types of portfolio. Portfolio management process. Measuring risk and return of portfolio (two-assets case). Meaning and aim of break-even analysis. Assumption of break-even analysis and application. Meaning and types of leverage. Computation of various types of leverage (operating, financial and combined). Meaning and significance of cost of capital. Computation of firm specific cost of capital (cost of equity, cost of debt, cost of preference shares and cost of retained earnings). Computation of firm's overall cost of capital. Factors influencing a firm's cost of capital. Meaning and types of mergers and acquisitions. Corporate issues arising in mergers and acquisitions. Introduction to corporate restructuring and reorganization. Methods of business reorganization. Introduction to financial markets. Financial market regulators.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 192 Introduction to Christian Theology (2 Units, Required; LH = 30).

Senate-approved Relevance

Pan-Atlantic University has a strong Christian identity which is shown in its openness to people of all races and religions. Its mission is "to form competent and committed professionals and encourage them to serve with personal initiative and social responsibility the community in which they work, thereby helping to build a better society in Nigeria and Africa at large". One of the objectives of the university is to also give a well-rounded formation of the human person, which includes some courses in the humanities. The course intends to present the essentials of the Christian faith and morals that are related to contemporary issues that inform the identity of the school and will form the basis of other courses on humanities that the students will be taught. It will also help the students to learn to think deeply about contemporary societal issues.

Overview

Nigeria is a multicultural and multi-religious country. Christians make up roughly half of the population of the country. The purpose of the course is to provide essential background on key aspects of Christian faith and morals, related to contemporary issues, as a means of giving students basic criteria to analyze contemporary situations and form a basis for critical analysis from a Christian perspective.

The course will also help the non-Christians understand some aspects of the Christian faith which fosters societal integration of people of different religions. The purpose of the course is to aid the students to understand man and the world from a Christian perspective and apply that knowledge to modern-day issues.

Objectives

The objectives of the course are to:

- state some basic philosophical concepts that are fundamental for theological discussion;
- 2. describe some fundamental concepts and mysteries of the Christian faith;
- 3. explain the place of man in the modern world and correctly judge
- 4. contemporary issues in the light of the Christian faith;
- 5. describe the relationship between law and human conscience;
- 6. describe human actions and determine their morality;
- 7. explain Christian morals and be able to judge situations with clear moral criteria; and
- 8. describe contemporary moral situations from a Christian perspective.

Learning Outcomes

On completion of the course, the students should be able to:

- 1. list at least 3 philosophical arguments about the existence of God;
- 2. synthesise a brief history of the Christian religion and the origins of the Bible;
- 3. Explain the relationship between science and faith using at least three concrete examples;
- 4. explain 3 modern theories about the relationship between creation and evolution;
- 5. apply human actions to determine their morality based on the three criteria of action, circumstance, and intention;
- 6. list and explain the Ten Commandments and their implications;
- 7. explain the Christian view of contemporary sexual issues like homosexuality, pornography and cohabitation;
- 8. explain the ethics of handling the truth: detraction and keeping professional secrets;
- 9. explain the ethics behind gambling; and
- 10. explain the ethics behind contemporary issues relating to human life and drug use.

Course contents

The Existence of God. Divine Revelation. Creation and Evolution. Jesus Christ: both man and God. Eschatology. Human Freedom. Natural Law. Moral Conscience. Human Acts. Factors that determine the Morality of Human Acts. Personal Sin and Responsibility. Influence of the Passions in Human Actions. The Virtues. Introduction to the Ten Commandments.

Contemporary human Life issues. Contemporary sexual issues. The morality of Gambling. Contemporary issues regarding handling the truth. Christian Prayer.

Minimum Academic Standard: A Classroom and Projector

200 Level

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

Learning Outcomes

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

- 1. explain the basic features of philosophy as an academic discipline;
- 2. identify the main branches of philosophy & the centrality of logic in philosophical discourse;
- 3. discuss 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 moulding and many others.

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. analyse 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
- 7. 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 Nurtured, Problem solver and change agent, Innovator 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 join 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.

SSC 202: Introduction to Computer and its Application (3 Units C: LH 45)

Learning Outcomes

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

- 1. explain the history of computing sciences;
- 2. discuss in detail the different computing programs and their characteristics;
- 3. evaluate different computer applications; and
- 4. apply search engines to source on-line resources.

Course Contents

Historical perspectives of computing sciences that gave birth to the different programs. Characteristics of each program in computing sciences. Hardware, Software; and human resources; Integration and application in business and other segments of society. Information processing and its roles in society. laboratory assignments using the PC's operating system, and several commonly used application software, such as word processors, spreadsheets, presentations, graphics and other applications. Internet and online resources, browsers, and search engines.

ECO 201: Introductions to Microeconomics I (2 Units C: LH 30)

Learning Outcomes

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

- 1. discuss the division of economics into microeconomics and macroeconomics;
- 2. define the laws of individual and market demand and supply and their elasticities; and
- 3. explain the basic elements in microeconomics in terms of foundation subject matter of household consumer behaviour using indifference curves, elementary production

and costs with isoquant and Isocost, treated in graphical form and simple mathematical capsules.

Course Contents

Introduction to microeconomics. The partial equilibrium analysis with respect to basic microeconomic variables like individual and market demand, individual and market supply. Shapes of the demand and supply curves. Price elasticity of demand. Arc and point elasticity of demand. Income and cross elasticities. Consumer behaviour: Cardinalist, Ordinalist using indifference curves, their graphical and mathematical presentation and Partial derivative. Consumer surplus. Income and substitution effects in consumption. Cobweb analysis. Government price control. The production functions. Introductory theories of production and cost: Short- and Long-run production with laws of diminishing returns or variable proportion, marginal rate of technical substitution, Isocost, returns to scale, expansion path and factor substitution. Graphical and mathematical treatments of these.

ECO 203: Introduction to Macroeconomics I (2 Units C: LH 30)

Learning Outcomes

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

- distinguish elements of microeconomics which deal individual households, firms and market from elements of macroeconomics that is concerned with aggregates in terms of nature and scope;
- 2. discuss economic models, general equilibrium and disequilibrium
- 3. identify the goals of macroeconomics; gross domestic product measurement and components; and
- 4. explain the basic theories of consumption, savings and investments in economic science as well as their determinants.

Course Contents

Distinction between Microeconomics and Macroeconomics in the context of partial and general equilibrium. The goals of macroeconomics. Nature and Scope of Macroeconomics. Concept of National Income Accounting, Gross Domestic Product (GDP) and its components, its calculation and derivatives. Gross National Product, GDP deflator and its uses, cost of living; consumer price index and National Income with its derivatives. Consumption and Savings theories and their determinants. The Multiplier and the relations between APC, APS, MPC, MPS. Also, the theories of investment and its determinants, as well as introduction to government roles within the context of a 3- Sector model.

ECO 202: Introduction to Microeconomics II (2 Units C: LH 30)

Learning Outcomes

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

- 1. appreciate the basic concepts and the working of market mechanism within the context of theories of demand, supply, consumer behaviour, production in the short and long run;
- 2. identify distribution of incomes to factors of production, and
- 3. discuss the structure of markets within the context of perfect and imperfect markets.

Course Contents

Recapitulation of the short-run and long-run production periods. The short-run and long-run cost curves. Fixed costs, variable costs, average costs and marginal costs. Cobb Douglass production function. Technical progress and production. Market structure: Axioms and determination of prices and output in perfect markets and imperfect markets, such as perfect competitive market, monopoly and price discrimination, monopolistic competition, oligopoly and different types, duopoly. Pricing of factors of production such as, wages, rent, interest and profit. Elementary price theory and its applications.

ECO 204: Introduction to Macroeconomics II (2 Units C; LH 30)

Learning Outcomes

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

- 1. discuss issues on the aggregate economy in relation to the functions and role of government with its policies;
- 2. identify the types of inflation and its positive and negative effects;
- 3. explain the types of unemployment and the Philips curve; and
- 4. discuss the external sector activities, particularly the international trade and role of exchange rate in payment system.

Course Contents

Introduction to government: government spending, taxes, transfers, subsidy and output. Government sector multipliers; multiplier for model with income taxes. Money and its functions, the banking system and functions. Income and Trade policy measures. The External sector: International trade, exchange rate regimes, international reserves and balance of payments.

ECO: 205 Structure of the Nigerian Economy (2 Units C: LH 30)

Learning Outcomes

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

- 1. discuss the Nigerian economy in pre- and post-colonial era and up to the present time, with regards to economic growth and development; and
- 2. identify and explain the number of economic sectors and broad contributions of each to the Nigerian economy over time, as well as the changes that have taking place since independence, with future prospects.

Course Contents

Introduction to development in the pre-colonial and post-colonial periods with regards to development of economic and social structure of the Nigerian economy. The modern nature and structure of the Nigerian economy: Primary Sector: Agriculture, Mining and other extractive industries. Secondary Sector: Small, medium and large-scale enterprises including manufacturing and allied enterprises with their Associations such as, MAN. The Tertiary Sector or Services: Banking, Insurance, Commerce, Shipping, Entertainment, Sports and many others, and their Associations like NACCIMA. The functions and roles of agriculture, industry and service sectors in Nigerian economic development. Growth of income, employment, wages and prices in Nigeria since independence.

ECO 206: Statistics for Economist (2 Units C: LH 30)

Learning Outcomes

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

- collect, analyse, utilise and present numerical data to make inferences as well as reach decisions both under certainty and uncertainty in economics, business, management and socio-political conditions;
- 2. apply simple statistical concepts to business, management and socio-political conditions; and
- 3. prepare both descriptive and inferential statistics using representative of a population and specified probability error.

Course Contents

Descriptive statistics: frequency distribution, measures of central tendency, measures of dispersion and shapes of frequency distribution. Probability and Probability distributions: probability of single and multiple events, discrete probability distribution and binomial distribution, Poisson distribution, normal distribution and continuous probability distribution. Statistical inferences from sampling, sampling distribution of the mean, estimation using the normal distribution and t distribution; confidence intervals. Statistical inference of Hypothesis testing: Testing hypotheses: about population mean and proportion; for differences between two means or proportions.; Goodness of fit, Analysis of variance, Chi Square test and Nonparametric testing.

ECO 207: Mathematics for Economists (2 Units C: LH 30)

Learning Outcomes

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

- 1. convert economic statements into mathematical formulation;
- 2. apply some simple mathematical concepts to day-to-day economic factors; and
- 3. solve and interpret mathematical models.

Course Contents

Derivatives of trigonometric functions. Sequences and series. Expansions, and Taylor's theory. Mathematical analysis of basic theories of economics as well as partial and total derivatives, differentials and difference equations. Applications of partial derivatives, maxima and minima; the Lagrange multiplier to theories of consumer behaviour and production functions. Linear algebra. Matrix algebra and Inverse matrix. Application of Simultaneous equations to macroeconomic issues in consumption and investments. Introduction to linear programming, game theory and in-put output analysis.

PAU-ECO- 208 Labour Economics (2 Units, Required; LH= 30)

Relevance

PAU's mission is to develop qualified and devoted professionals for the Nigerian environment, which is expected to have one of the world's largest economies in the future due to factors including high labour force, increasing entrepreneurial activities, and increasing number of tertiary institutions graduates. Graduates with considerable training and knowledge in labour economics concur with this vision. Evidence of applicability comes from PAU economics graduates' capacity to give excellent people management solutions and ethical collective bargaining methods.

Overview

The optimal utilization and management of human resource, for both corporate and social objectives, in today's world, in and outside the workplace environment or in an economy at large notably solicits an in-depth understanding of the workings of the labour market as well as fruitful implementation of both traditional / conventional and non-traditional / unconventional human resource (HR) pathway(s) or strategies, amidst others. Hence, this course is to fill this vacuum highlighted as part of the learning phase of every potential economics graduate (or students in economics).

The aim of this course is to provide intuition to a thorough understanding of the labour market and its attendant problems. To attain the aim of this course, students would be exposed to, amidst others, definition and concepts, labour market theories, economics of wage determination as well as the nature of labour market problems in developing countries.

Objectives

The objectives of the course are to:

- 1. explain students to the meaning, scope and importance of labour economics;
- 2. describe on the nature, causes and probable remedies to labour problems in developing economies;
- 3. state some issues related to labour force and unemployment;
- 4. explain some reasons for labour market failure;
- 5. identify the exposure to labour turnover; and
- 6. define exposure to labour absenteeism.

Learning Outcomes

On completion of the course, students should be able to:

- 1. describe the meaning, scope, and importance of labour economics;
- 2. explain 5 peculiarities of labour as a resource in production;
- 3. recognize instances and or types of unemployment in varied scenarios;
- 4. demonstrate knowledge on some reasons for labour market failure;
- 5. recognize some rationale to addressing labour turnover; and
- 6. outline 7 rationale to addressing labour absenteeism.

Course Contents

Introduction. Labour Market Optimality and Failure. Nature of labour. Causes and Probable Remedies to Labour Problems in Developing Economies. Labour Force. Types and Consequences of Unemployment. Using monetary and fiscal policies as tools in addressing unemployment. Labour demand and its determinants. Labour supply and its determinants. Determinants of equilibrium wage rate. Unions and Collective Bargaining. Labour Turnover. Labour Absenteeism. Labour Market Theories. Manpower Development.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO- 209 Introduction to Statistics (3 Units, Core; LH= 45)

Senate-approved Relevance

"To produce competent and committed professionals and inspire them to serve with personal initiative and social responsibility the community in which they work, so helping to establish a better society in Nigeria and Africa as a whole," reads the mission statement of Pan-Atlantic University. Because of this, the Pan-Atlantic University is dedicated to creating strong leaders who would use their knowledge of and applications of statistical principles and analyses to address economic and business issues on a national and worldwide level in the most morally and ethical way possible.

Overview

The Nigerian state and the African continent at large face severe socio-economic challenges such as poverty, unemployment, and inflation among others, which are exacerbated by poor application of statistical data in planning.

Also, the inability of most policymakers to understand simple data-driven decision-making processes gives rise to the following pertinent questions: without statistics, how can we plan? Would our decisions be more fruitful if we relied on statistical evidence? Should all government institutions and private organisations rely on statistical data analysis to formulate policy and do adequate planning?

This course is designed to introduce our world-class students to the role of Statistics in Social Sciences. It seeks to establish the relevance of Statistics in making informed socio-economic decisions. The course exposes the students to Statistical procedures, such as; data collection, collation, presentation, analysis, interpretation, and inference.

Objectives

The objectives of the course are to:

- 1. explain the basic concepts: meaning and origin of Statistics, data, types of data, sources of data;
- 2. describe the importance of Statistics in Social Sciences and other disciplines;
- 3. explain the descriptive branch of Statistics with a focus on the collection and presentation of live data in Tables, Charts and Graphs;
- 4. demonstrate the estimation of summary statistics such as the measure of central tendency (average), the measure of dispersion, measures of location and measure of relationship;

- 5. explain to students to arrive at the knowledge of inferential Statistical analysis such as estimation, the test of hypothesis and simple forecasting and their application to economic data;
- 6. solve practical application of descriptive and inferential statistical tools in economic and business decisions, economic planning and policy formulation; and
- 7. relate students to a practical collection of live data from primary and secondary sources, and perform data presentation and analyses using basic software such as Excel, SPSS and EViews.

Learning Outcomes

On completion of the course, students should be able to:

- 1. explain at least five (5) basic concepts in Statistics and trace the origin of Statistics as a discipline;
- 2. identify the five (5) roles of Statistics in Social Sciences and at least three (3) other fields:
- 3. demonstrate how to collect data from two (2) sources: primary (survey) and secondary sources (CBN and World Bank) and present them in Tables and Figures;
- calculate a minimum of three (3) summary statistics each from the measures of average, dispersion, location and relationship and interpret their estimates for informed decisions;
- 5. demonstrate adequate understanding of estimation, a simple test of hypothesis and forecasting of socio-economic variables when given historical data; and
- 6. use any two (2) Statistical software among Excel, SPSS and Eviews for data presentation and analysis.

Course Contents

Meaning, evolution and branches of Statistics. Roles and limitations of Statistics in Social Sciences and other disciplines. The concept of data. Classification of data. Measurement of data. Sources and nature of published statistical data in Nigeria and their uses and limitations. Methods of collecting data – census and surveys. Population, sample and sampling techniques. Data presentation in Tables, graphs and diagrams (charts). Frequency distributions. Measures of central tendency. Measures of dispersion. Measures of location. Measures of relationship. Rules of probability. Discrete probability distribution (Binomial and Poisson distributions). Simple tests of hypotheses. Simple regression analysis. Index numbers. Introduction to Excel, SPSS and Eviews software.

Minimum Academic Standard: A Classroom and Projector

PAU- ECO 292 The Nature of Human Beings (2 Units, Required; LH = 30)

Senate-approved Relevance

The openness of Pan Atlantic University to persons of all racial and religious backgrounds is indicative of its strong Christian identity. Its goal is "to form competent and committed professionals and inspire them to serve the community in which they work with personal initiative and social responsibility, so contributing to the development of a better society in Nigeria and throughout Africa." One of the goals of the university is to provide a well-rounded education for the individual, which includes some humanities courses. In order to ensure that its students invest time in humanities and liberal arts courses that secure their whole development as people and create in them the highest esteem for human dignity while instilling in them a spirit of service to mankind, Pan-Atlantic University has made it a priority.

Overview

An anthropological crisis is at the root of most of the social and moral problems confronting contemporary society due to a resurgence of doubts as regards the true nature of human beings. This situation calls for intervention in the form of philosophical anthropology to the nagging existential questions such as; Who is a human being? What kind of difference exists between human beings and animals? What is the meaning of life? What is the foundation of human dignity? What is human fulfilment? Is death the end of life? etc.

This course is designed to introduce the students to the philosophical basis of considerations about the human person. It seeks to establish what/who the human person is with the aim of bringing the students to a due appreciation of the human person and human dignity. The course exposes the students to human potencies and faculties, such as; rationality, understanding, imagination, freedom, Will, and emotions. The students will also be exposed to various conceptions of the human person across different epochs, the idea of death, immortality of the soul, and human destiny.

Objectives

The objectives of the course are to:

- 1. explain to students the basic concepts in philosophical anthropology;
- describe human beings as higher animals;
- describe human rationality with a focus on the intellect and Will;
- 4. state other aspects of human nature such as; relationality, freedom and responsibility, and human virtues;
- 5. appraise the conversation and guide the students to arrive at the knowledge of human existence, the meaning of life, and human fulfilment;
- 6. explore human dignity and its practical consequences; and
- 7. relate the idea of human death, arguments about the immortality of the human soul, and human destiny.

Learning Outcomes

On completion of the course, students should be able to:

- 1. explain the basic concepts in philosophical anthropology;
- 2. compare the nature of human beings with the nature of lower animals;
- 3. explain the operations of the human intellect and Will;

- explain human dignity, its foundation, and its practical consequences of human dignity in socio-political, economic, and cultural practices as well as in technology development;
- 5. demonstrate knowledge of human virtues and their development in the human person;
- 6. relate the phenomenon of human death, the immortality of the soul, and how the idea of death shapes one's sense of meaning and value of one's life and that of others.

Course Contents

Introduction and conceptual clarifications. Human beings as higher animals. Human emotions and emotional Intelligence. The rationality of human beings – intelligence and will. The unity of the human person. Human sexuality. The nature of Human Freedom. Freedom and truth. Freedom and Evil. Human beings as social beings. Expanded view of the social environment – virtual world and meta-verse. Human beings as working beings – the objective and subjective dimensions of human work. Human development – the virtues. The dignity of human beings and its practical consequences. Human fulfilment. Existence and the meaning of Life. The phenomenon of Human death.

Minimum Academic Standard: A Classroom and Projector

PAU- ECO 293 English for Business Purposes (2 Units, Required; LH = 30)

Senate-approved relevance

Pan Atlantic University's welcoming attitude toward people of all racial and religious origins is a sign of its strong Christian identity. "To form competent and committed professionals and encourage them to serve the community in which they work with personal initiative and social responsibility, so contributing to the building of a better society in Nigeria and throughout Africa," is the organization's stated mission. A well-rounded education for the person, which includes some humanities classes, is one of the university's objectives. Pan-Atlantic University has made it a priority to make sure that its students spend time in humanities and liberal arts courses that assure their whole development as individuals, foster in them the highest appreciation for human dignity while fostering in them a spirit of service to mankind.

Overview

English for Business Purposes (EBP) is a key aspect of practical business communicative processes. This course will help the students acquire the knowledge and skills required for their business and work life. This makes teaching them these skills relevant to enable them to perform effectively in their future endeavours.

Additionally, for many different reasons, difficult to engage in modern forms of writing. In this age of new media where business communication is digitally mediated, students need to be proficient in diverse forms of writing to succeed in their business endeavours.

Objectives

The objectives of this course are to:

1. state the importance of English for business purposes for effective communication in the workplace;

- 2. describe the techniques for writing different business documents;
- 3. explain how to use different media applications for effective business communication in the 21st century;
- 4. solve practical exercises on writing different types of business documents; and
- 5. identify students' communicative challenges for more practical demonstrations.

Learning outcomes

On completion of the course, students should be able to:

- 1. state at least five importance of English for business purposes for effective communication in the workplace;
- 2. describe the techniques for writing at least five types of business documents;
- 3. use at least five different media applications for effective business communication in the 21st century;
- 4. write at least five different types of business documents for effective communication to a target audience; and
- 5. demonstrate ability to write business documents such as memos, business letters, communique, and executive summaries.

Course contents

English as a language of global communication. Diversity in writing. Cross-cultural differences in writing. Writing for exporting. Writing reviews. Writing for the Internet. Writing to lead, inspire, and change. Commercial communication. Business documents. Business presentation skills. Giving feedback and performance reviews. Dialogue and protocol in business communication. Interviews and negotiation skills. Language and the new media. Content creation. Learning and memory skills. Effective time management for business executives. Goal setting for business management.

Minimum Academic Standard: A Classroom and Projector

300 Level

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. analyse 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 organisations, media and traditional institutions in peace building.

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 Phenomenon. Boundaries/boarder disputes; Political disputes. Ethnic disputes and rivalries. Economic Inequalities. Social disputes; Nationalist Movements and Agitations. Selected Conflict Case Studies - Tiv-Junkun; Zango Kartaf, Chieftaincy and Land disputes and many others. Peace Building, Management of Conflicts and Security: Peace & Human Development. Approaches to Peace & Conflict Management ---(Religious, Government, Community Leaders and many others). Elements of Peace Studies and Conflict Resolution: Conflict dynamics assessment Scales: Constructive & Destructive. Justice and Legal framework: Concepts of Social Justice. The Nigeria Legal System. Insurgency and Terrorism. Peace Mediation and Peace Keeping. Peace & Security Council (International, National and Local levels) Agents of Conflict resolution – Conventions, Treaties Community Policing: Evolution and Imperatives. Alternative Dispute Resolution, ADR.Dialogue b). Arbitration, c). Negotiation d). Collaboration and many others. Roles of International Organizations in Conflict Resolution. (a). The United Nations, UN and its Conflict Resolution Organs. (b). The African Union & Peace Security Council (c). ECOWAS in Peace Keeping. Media and Traditional Institutions in Peace Building. Managing Post-Conflict Situations/Crisis: Refugees. Internally Displaced Persons, IDPs. The role of NGOs in PostConflict Situations/Crisis.

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;
- 6. implement the requirements for establishing and managing micro and small enterprises;
- 7. conduct entrepreneurial marketing and e-commerce;
- 8. apply a wide variety of emerging technological solutions to entrepreneurship; and
- 9. 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). 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 & 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. Negotiation and Business communication (Strategy and tactics of negotiation/bargaining, Traditional and modern business communication methods). Opportunity Discovery Demonstrations (Business idea generation presentations, Business idea Contest, Brainstorming sessions, Idea pitching). Technological Solutions (The Concept 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 and many others. Digital Business and E-Commerce Strategies).

ECO 301: Intermediate Microeconomic Theory I (2 Units C: LH 30)

Learning Outcomes

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

- 1. apply some level of mathematics to solving optimization problems in consumer behaviour and production using langragian analysis;
- discuss the optimising behaviour of households in the consumption decision and the optimisation decision making by firms in their production processes given available factor inputs; and
- 3. explain inferences from theorems and appreciate the simplicity of economic models viz-a-viz the complexity of the true world situation.

Course Contents

Advanced topics in consumer demand theory: Separable and additive utility functions; homogeneous and homothetic utility functions. Slutsky and Hicks substitution effects of changes in prices and incomes. The theory of Revealed Preference in consumption and the demand for characteristics. Composite commodities, consumer's surplus. The theory of the firm: the Production functions (Homogeneous, CES, Leontief and many others), production curves and shapes; Elasticity of substitution; optimising behaviour, input demand functions. The cost functions in the short and long run. Constrained Revenue maximisation and Profit maximisation.

ECO 303: Intermediate Macroeconomic Theory I (2 Units C: LH 30)

Learning Outcomes

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

- 1. present national income multipliers for 4-sector model;
- 2. know the theories of consumption and investments under certainty and uncertainty;
- 3. explain the economic fundamentals relating to public sector economics and finance; and
- 4. proffer solutions to some public sector problems, with their understanding of government policies

Course Contents

The concepts and multipliers of national income components in an open economy or 4-Sector model using the Keynesian model. Theories of Consumption (KIH, RIH, PIH & LCH); Investments: Types, Assumptions, Physical theories like accelerator, MEI and MEC, Tobin Q and Financial theories like Shapiro's profit theory, Jorgensen's investment theory). The IS – LM analytical framework within the context of equilibrium in the goods sector and the

monetary sector. The multiplier effects of monetary and fiscal policies in an IS-LM framework.

ECO 302: Intermediate Microeconomics II (2 Units: LH 30)

Learning outcomes

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

- 1. identify and distinguish between and among different market structures in industrial settings;
- 2. discuss the behaviour, conduct and performance of businesses under different market structures; and
- 3. appreciate how consumers, businesses and government combine available resources to produce output at optimal levels.

Course Contents

Market structure and optimization exercises: Perfect competition – demand function, supply function, commodity market equilibrium, factor market equilibrium. The existence and uniqueness of equilibrium with issue of stability. Imperfect competition – Monopoly and price discrimination, Monopsony and Monopolistic competition. Duopoly, Oligopoly (collusive and non-collusive leadership) and Bilateral Monopoly. Issues of revenue, output and profit and maximization in each market. Limiting pricing or entry preventing pricing theories. Exchange theory, offer curves, and contract curves. General Equilibrium theory.

ECO 304: Intermediate Macroeconomics II (2 Units C: LH 30)

Learning outcomes

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

- 1. discuss some policy issues on international economy;
- undertake some analysis of government policies with respect to economic growth, treatment of monetary and fiscal policies in closed and open economy (capital mobility, exchange rate regimes and environment);
- 3. appreciate workings of an economy within the framework of the new classical and Keynesian macroeconomics; and
- 4. explain issues in economic development as well as international trade and balance of payment adjustments.

Course Contents

Theories of economic growth: The Classical/Neo-Classical growth models (H-D model, Nicholas Kaldor, Pasinetti, Joan Robinson & Solow models), the Marxian theory of growth model, Keynesian growth model. The Endogenous growth model (Arrow, Romer, Lucas, and many others) The government economic policies including fiscal and monetary theories and policies. Theories and problems of unemployment and inflation. The international economy involving trade, exchange rates and balance of payments theories (Portfolio Balance, Keynesian theory, Monetary approach, Purchasing Power Parity and many others.) and policy measures for Balance of Payments adjustments.

ECO 305: History of Economic Thought (2 Units C: LH 30)

Learning Outcomes

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

- 1. appreciate the roles of classical economists in separating economics subject matter from political economy stand- alone discipline;
- 2. discuss the forerunners economics disciplines like the position of physiocrats and mercantilists as well as the position of such schools of thought like utilitarianism, German romanticism, the historical school and institutionalists; and
- 3. explain roles of Keynesian, neo-Keynesian, new classical and other new schools of economic thoughts.

Course Contents

The Physiocrats, Mercantilism, classical economics, neo-classical school of thought, as well as evolution and contemporary development of Marxian School of Economic thought, the Marginalist, positive and welfare schools of economic thought, institutional economics, Keynesian School of Economic thought, the Monetarists, and the Rational Expectation School (RATEX). The Supply Side economics. Contemporary state of development in economics and prospects are examined within the context of development theories relevant to emerging and developing economies around the world.

ECO 306: Introductory Econometrics (3 Units C: LH 30; PH 45)

Learning Outcomes

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

- 1. explain the various concepts used in econometrics;
- 2. derive simple ordinary least squares estimates and the statistical relationship of data set like the goodness-of-fit, the t-statistics and making inferences from results of simple/multiple regression and interpret estimated models; and
- 3. carry out data formatting, data mining, data processing and interpretation of estimated models.

Course Contents

Beginning with extensions of the two–variable linear model. The course should cover introduction to matrix algebra and algebra of econometrics. The General linear model and generalized lease square procedure, violations of linear model assumptions and the correction of serial correlation (autocorrelation) of the errors, intercorrelation (Multicollinearity) of the variables, stochastic regressions and errors in variables are also discussed. Other topics are identification of problems, meaning, detection and correction of simultaneous models and estimations, K-class estimators, and the choice of estimators. Students will be engaged in practical assignments and familiarity with software computer applications for econometrics such as E-views, Stata, SPSS and many others.

ECO 307: Project Evaluation (3 Units C: LH 30 PH 45)

Learning Outcomes

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

- 1. explain the fundamental of cost analysis;
- 2. define financial terminology and concepts;
- 3. conceptualise, prepare and execute/assess projects for small and medium scale enterprises;
- 4. design cash flow analysis, risks and uncertainty assessment, cost-benefit analysis, and other standard analytical techniques for evaluating investment proposals in the natural resource industries; and
- 5. account for and able to judge and select the right projects from alternatives.

Course Contents

Definition and classification of projects and project evaluation are introduced. Topics are location and size of projects, calculation of investments required for a project, and evaluation of projects. Other topics are appraisal of projects from commercial and social view points and cash flow analysis. Project and the overall view of development programme data requirements. Evaluation of proposed investments via Payback method, Return on investment (ROI), Total life cycle ratio or present value method, Saving/Investment ratio or Benefit/Cost ratio; Net Present Value (NPV) and Internal rate of return (IRR). Students are to carry out practical project evaluation of identified businesses.

ECO 308: Public Sector Economics (2 Units C: LH 30)

Learning Outcomes

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

- 1. discuss the roles of governments under various fiscal systems of free, mixed and centrally planned economics;
- 2. explain the allocation, distribution and stabilization functions of the government given the fiscal instruments at its disposal; and
- 3. identify the background theories of public sector economics as a guide to higher level economics on role of government in economic growth and development.

Course Contents

The concept and scope of the public sector is examined. The importance and goals of public policy. Roles of government under different economic systems: capitalism, socialism and mixed economic system. Theories of public policy: Ernest Engel law. Piguo and Dalton theory. Musgrave and Musgrave theory. Keynesian theory, Wagner's theory. Peacock and Wiseman theory. Luzano theory and many others. Public sector Revenue and Expenditure instruments. Public sector policy and market/State failure. Quantitative skills for public policy: exploration of applications of game theory to public policy analysis. Public debt issues. Institutions, structure and public policy.

SSC 301: Innovation in the Social Sciences (2 Units C: LH 30)

Learning Outcomes

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

- 1. enumerate innovative ideas that borders on societal problems;
- 2. apply social science knowledge to research on public and private sectors;
- 3. design techniques for proposal writing;
- 4. appreciate social and human welfare services, and
- 5. analyse models for establishing family and community development.

Course Contents

Identifying Innovative ideas in dealing with Societal Problems and Environmental Issues. Establishing and mobilising resources for establishing enterprises through which social science knowledge can be applied to social research for public and private sectors; social and human welfare services such as care for children and the elderly, training consulting services; Proposal writing techniques for grants, Managing grants. Models for establishing Family Social Health Centres, Community Gender Balancing Units, and Community Development Management Units. Social Sciences and innovation in technology and Patenting new ideas.

SSC 302: Research Method I (2 Units C: LH 30)

Learning Outcomes

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

- 1. explain the concept and scope of research methods;
- 2. discuss in detail procedures for conducting a research;
- 3. discuss the principles guiding research; and
- 4. discuss types of research experimental non-experimental and quasi-experimental research.

Course Contents

Introduction to Social Science research protocol with particular emphasis on proposal development; literature review (conceptual, empirical and theoretical framework), ethnography of the study area statement of the research problem, sampling procedures and methods of data collection and instruments.

PAU-ECO 311 Development Economics (2 Units, Required; LH = 30)

Senate-approved Relevance

With high rates of unemployment or underemployment, rising inequality, high rates of poverty and slow growth, a lack of fiscal room to preserve jobs, macroeconomic instability, and frequent shocks to the balance of payments, the Pan-Atlantic University seeks to develop competent and dedicated professionals and encourages them to serve with social responsibility and personal initiative the community in which they work, thus contributing to the provision of solutions to the issues of d As a result, Pan-Atlantic University is dedicated to developing devoted and selfless leaders who will propose and carry out laws that will steer the country's economy in the direction of advancement.

Overview

The goal of this course is to provide students with the essential tools and concepts of development economics, to prepare them to understand what makes underdevelopment persist and what helps development succeed. In addition, diverse dimension and measures of development, as well as the application of microeconomic analysis to issues of development in poor countries, including the study of household decisions and the analysis of institutions and norms influencing development.

Furthermore, the course is designed to help students gain a better understanding of the major challenges and prospects for broad-based economic development. It would expose the students to theories of economic development and practices to develop and implement policies aimed at positioning a less-developed economy on the path of development.

Objectives

The objectives of the course are to:

- 1. explain the basic concepts of growth and development;
- 2. describe the characteristics of developing economies;
- 3. explain the United Nations' sustainable development goals (SDGs);
- 4. demonstrate to the students on the various indices of measuring human development;
- 5. explain the different theories of economic development and growth models;
- 6. describe problems and policy issues that affect economic development;
- 7. describe issues bothering the environment and climate change and how they can be mitigated;
- 8. explain foreign aid and economic development; and
- 9. describe the impact of international trade on the economic development of LDCs.

Learning Outcomes

On completion of the course, students should be able to:

- 1. distinguish between the concept of economic growth and development;
- 2. list at least eight (8) characteristics of less-developed countries (LDCs);
- 3. state any ten (10) United Nations' sustainable development goals (SDGs);
- 4. demonstrate how to use the human development index (HDI) and the physical quality of life index (POLI) to measure the level of human development of a nation;
- 5. explain the theories of economic development: Classical theories of development, neoclassical theories, and economic growth models;
- 6. explain key policy issues: such as poverty, inequality, and human capital development.
- 7. explain issues bothering the environment and climate change and how they can be mitigated.
- 8. list four (4) arguments for and against foreign aid in developing countries; and
- 9. apply the Vent for surplus theory to explain the benefits of international trade in developing countries.

Introduction and concepts of economic growth and development. Development and under-development. Sustainable development. Characteristics of a developing country. Obstacles to development and strategy to remove them. Theories of economic development- Classical, Neoclassical, Schumpeterian, Harrod-Domar, Dualism, Marxian, Balanced and unbalanced growth. Resource of technology. International trade and aid policy issues and case studies. The microeconomic foundations of economic development. Economic growth. Inequality. Poverty traps. Labor markets. Capital markets. Education. Health. Gender. Service delivery. Taxation. The role of the state. Governance and accountability. Conflict. Access to finance. Infrastructure. Trade, firms, and markets. Energy, environment, and climate change. Corruption and Environmental Issues.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 312 Data Science for Social Scientist (2 Units, Core; LH = 15, PH = 45)

Senate-approved Relevance

Economics graduates who have received extensive training and knowledge in a data science are in line with PAU's mission to develop capable and dedicated professionals in order to produce economists for the Nigerian environment, which is anticipated to be one of the largest economies in the future with huge financial and economic data. PAU economics graduates demonstrate relevance by using by using their knowledge and application of data science in the most ethical manner to address economic and business problems nationally and internationally.

Overview

Data Science sits at the intersection of good hacking skills, mathematics and statistics knowledge, and substantive expertise. Data science and machine learning are exciting new areas that combine scientific inquiry, statistical knowledge, substantive expertise, and computer programming. One of the main challenges for businesses and policy makers when using big data is to find people with the appropriate skills. Good data science requires experts that combine substantive knowledge with data analytical skills, which makes it a prime area for social scientists with an interest in quantitative methods. This course extends the foundation of probability and statistics with an introduction to the most important concepts in data science and applied machine learning, with social science examples.

It will cover the main analytical methods from this field with hands-on applications using example datasets, so that students gain experience with and confidence in using the methods we cover. At the end of this module, students will have a sound understanding of the field of data science, the ability to analyze data using some of its main methods, and a solid foundation for more advanced or more specialized study.

Objectives

- 1. describe the variety of data analysis methods which should be useful in quantitative research.
- 2. explain the potentials of data science in social sciences;

- 3. relate data science practitioners and explore real-life data science applications from a social science perspective;
- 4. describe the limitations, value added and heuristic mechanisms of different data analysis methods.
- 5. describe hands-on experience addressing real-world data science problems and challenges; and
- 6. use training in skills that are in high-demand among data scientists but which are not considered part of an integral training;

Learning Outcomes

On completion of the course, students should be able to:

- 1. identify the best data sources;
- 2. appraise and generate, aggregate and visualize qualitative and quantitative data;
- 3. identify the correct method for a given research task;
- 4. apply acquired knowledge about research methods and techniques to their own works;
- 5. prepare their own research in accordance with given methodological requirements;
- 6. use the R package to analyze data; and
- 7. use with applying empirical methods to data and working skills of empirical research in social science.

Course Contents

The fundamentals of the data science approach, with an emphasis on social scientific analysis and the study of the social, political, and economic worlds. A survey of the methods of statistical learning, and its link to more classical methods of probability and statistical inference. An introduction to machine learning, including common supervised and unsupervised methods. Methods of evaluating and improving model performance. Computer programming, including the hands-on use of programming through course exercises. Applications to real data through hands-on exercises. How to integrate the insights from data analytics into knowledge generation and decision-making. Data Structure and Clustering. Network analysis in social sciences: basic concepts. Quantitative modelling in social sciences. Text as data in social sciences. Privacy and Regulation in Data Science. Governance and Professionalism in Social Data Science. Big Data and Development. Big Data and Measuring the Public's Responses to Climate Change. An introduction to natural language processing and text analysis. Data visualization through a variety of graphs.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO-313 International Trade Theory and Policy (2 Units, Elective; LH= 30)

Senate-approved Relevance

PAU's mission is to develop capable and dedicated professionals in order to produce economists for the Nigerian environment, which is anticipated to be one of the largest economies in the future with enormous opportunities for financial and trade openness. Economics graduates who have received extensive training and knowledge in international trade and policy are in line with this mission. As a result, PAU economics graduates show relevance by applying their understanding of and application of international trade theory and policy to enhance Nigeria's balance of payments position, promote reciprocal trade ties amongst trading partners, and lastly guarantee inclusive growth.

Overview

This course provides a theoretical analysis of international trade topics with references to empirical evidence. The course covers the main theories of international trade and international trade policies. Students will learn the main empirical patterns of current international trade and how to access sources of this information. They will become familiar with the concept of comparative advantage, and study models showing how technological differences, differences in resource endowments, and economies of scale determine trade patterns and income distribution. The effects of various trade policy instruments on welfare will be analyzed. Students will acquire the problem-solving skills necessary to analyze these and similar matters.

The course is primarily designed to equip students with the knowledge of the workings of the global economy, as well as analyze the effects of international trade liberalization and foreign capital mobility on domestic policies. To this end, the analysis relies on economic tools and theories to examine current policies in the global economic space.

Objectives

The objectives of the course are to:

- 1. Describe the basic concept of international trade and the gains from trade;
- 2. explain the various theories of international trade;
- 3. explain the basis of trade: insight from the Factor Endowments and the Heckscher-Ohlin Model;
- 4. describe the arguments revolving around foreign trade protections;
- 5. define the concepts of economic integration and elucidate on the basic level of integration as well as its effects;
- 6. explain what is meant by a country's balance of payment and how it is constructed;
- 8. describe the different approaches to external balance;
- 9. define the concept of exchange rate and discuss the types of exchange rate systems.

Learning Outcomes

On completion of the course, students should be able to:

- 1. define international finance and demonstrate the consumption and production gains from trade with the aid of a diagram;
- 2. explain trade theories: Mercantilism and the transition to the Classical World of David Ricardo:
- 3. demonstrate how different relative factor prices generate a basis for trade;
- 4. explain the two (2) key forms of protectionism: tariffs and non-trade barriers (NTBs).
- 5. compare among the four (4) basic levels of economic integration;
- 6. compare and contrast the differences between alternative accounting balances within the balance of payments;
- 7. explain the two (2) approaches to external balance: monetary and portfolio balance; and
- 8. describe the differing impacts of fixed and flexible exchange rates on international trade, international investment, and resource allocation.

Introduction to international. International trade theory. Absolute and comparative advantage. Relative factor abundance and relative factor intensity. Foreign trade protection. Regional and global economic integration. Balance of payments. Foreign aid capital flows. The uses of international economics in explaining contemporary international relations and diplomacy. Determination of exchange rates, money, and prices in open economies. Costs and benefits of different nominal exchange rate regimes and their sustainability. Causes and consequences of debt and default. Speculative attacks and financial crises. Increasing returns to scale and imperfect competition. Gains and losses from trade. Trade liberalization and protectionism.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 314 Business Ethics (2 units, Core; LH = 30)

Senate-approved relevance

The goal of Pan-Atlantic University is to create competent, devoted professionals who are inspired to serve their communities with initiative and social responsibility. This will improve society in Nigeria and throughout Africa. Even while economics graduates from prestigious schools have been taught the professional parts of their employment, the ethical aspects of their training may still be inadequate as evidenced by the fact that many of the world's financial scandals have been linked to these graduates. This course guarantees that our economics graduates practice their profession in a way that respects the dignity of the human person and the society in which they serve, in keeping with the mission of the institution. The need for managers who behave honourably in all situations demonstrates the course's significance.

Overview

Specifically, the course ensures that graduates carry out their tasks with a firm commitment to the fundamental ethical principles in the fulfilment of their responsibilities towards their clients, employees, shareholders, the environment, and society at large.

This course enhances the ethical consciousness of students by introducing them to fundamental ethical principles. The students are also made to understand that businesses do not have to be run as charitable organizations for them to be ethical but that one can run a business ethically and make good profit margins. The course outlines and explains the responsibilities to different stakeholders that businesses have to fulfil to be ethical.

The student's abilities are tested by challenging them with both 'real' and 'made-up' case studies where the students are expected to evaluate the actions of the protagonists and suggest ethical alternative courses of action.

Objectives

- 1. explain the fundamental moral principles;
- 2. explain the responsibility that a business has to its customers;
- 3. explain the responsibility that a business has to its shareholders;
- 4. explain the responsibility that a business has to its employees;

- 5. explain the responsibility that a business has to the environment (environmental sustainability);
- 6. explain the concepts of lying, misleading, and falsehood in relation to the norms of communication ethics;
- 7. evaluate issues like acceptance of gifts, extortion, and bribe in the context of conflict of interest; and
- 8. explain the need for professional loyalty and personal integrity in conducting business affairs.

Learning Outcomes

Upon completion of the course, students should be able to

- 1. state and explain the 7 fundamental moral principles;
- 2. explain the responsibility that businesses have to their customers with regard to fair pricing and value creation;
- 3. explain the responsibility that businesses have to their shareholders in terms of efficient use of resources and profit optimization;
- 4. explain the responsibility that businesses have to their employees with regard to fair wages and respect for human dignity;
- 5. describe and differentiate the concepts of lying, misleading, and falsehood with regard to financial reporting and advertising;
- 6. differentiate and evaluate issues regarding the acceptance of gifts, extortion, bribe, and cooperation in theft within the context of corruption and conflict of interest;
- 7. explain why they should be professional and act with personal integrity in their practice; and
- 8. identify an ethical evaluation of business case studies using knowledge of all the above.

Course content

Review of ethical theory. Human goods and fundamental moral principles. Introduction to business ethics. Responsibility to customers. Ethics of Pricing. Ethics of Advertising. Responsibility to shareholders. Responsibility to Employees. Managing the challenge of corruption. Questionable Payments. Ethics of Corporate Social Responsibility. Responsibilities in relation to the environment (environmental sustainability). Conflicts of Interest. Acceptance of Gifts. Insider trading. Professional loyalty. Personal integrity. Wages and Human Dignity. Financial Reporting.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 315 Artificial Intelligence (2 Units, Core: LH = 15; PH = 45) Senate—approved relevance

In order to prepare economists for the Nigerian environment, which is predicted to be one of the major economies in the future with enormous prospects for financial and trade openness, PAU's purpose is to develop capable and devoted professionals. Graduates in economics who have studied artificial intelligence in-depth are in accord with the aim of the University. As a result, PAU economics graduates demonstrate their relevance by using their knowledge of artificial intelligence and its applications to enhance the quality of daily life by performing routine and even complex tasks better than humans can, which makes life easier, safer, and more productive and leads to improved growth.

Overview

This course teaches what every student should know about Artificial Intelligence. AI is a fast-moving technology with impacts and implications for both our individual lives and society as a whole. In this course, students will get a basic introduction to the building blocks and components of artificial intelligence, learning about concepts like algorithms, machine learning, and neural networks.

Students will also explore how AI is already being used, and evaluate problem areas of AI, such as bias. The course also contains a balanced look at AI's impact on existing jobs, as well as its potential to create new and exciting career fields in the future. Students will leave the course with a solid understanding of what AI is, how it works, areas of caution, and what they can do with the technology.

Objectives

The objectives of the course are to:

- 1. explain the meaning and evolution of artificial intelligence;
- 2. describe the types and scope of artificial intelligence;
- 3. describe agents, agent faculties, rationality, agent environment, and agent architectures;
- 4. describe search and general classes of artificial intelligence search;
- 5. describe types of problems and techniques in artificial intelligence;
- 6. explain semantic network; and
- 7. describe natural language processing.

Learning Outcomes

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

- 1. explain AI fundamentals, concepts, goals, types, techniques, branches, applications, A technology and tools;
- 2. discuss intelligent agents, their performance, examples, faculties, environment and architectures, and determine the characteristics of a given problem that an intelligent system must solve;
- 3. describe the Turing test and the "Chinese Room" thought experiment, and differentiate between the concepts of optimal reasoning/behaviour and human-like reasoning/behaviour;
- 4. describe the role of heuristics and the trade-offs among completeness, optimality, time complexity, and space complexity;
- 5. analyse the types of search and their applications in AI and describe the problem of combinatorial explosion of search space and its consequences;
- 6. demonstrate knowledge representation, semantic network and frames along with their applicable uses;
- 7. practice Natural Language Processing, translate a natural language (e.g., English) sentence into a predicate logic statement, convert a logic statement into clause form, apply resolution to a set of logic statements to answer a query; and
- 8. analyse programming languages for AI and expert systems technology, and employ application domains of AI.

Overview of Artificial Intelligence. History of AI. Goals of AI. AI Technique. Types of AI. Branches and applications of AI. Advantages and Disadvantages. Introduction to Intelligent Agents. Agent Performance, Examples of Agents, Agent Faculties, Rationality, Agent Environment. Agent Architectures. Search. General Classes of AI Search Algorithm Problems. Problem Solving by Search. Types of AI Search Techniques and Strategies. Introduction to the types of problems and techniques in AI. Problem-Solving methods. Major structures used in AI programmes. Knowledge Representation. KR and Reasoning Challenges. KR Languages. Knowledge representation techniques such as predicate logic, non-monotonic logic, and probabilistic reasoning. Semantic Network - types of relationships, semantic network inheritance, types and components. Introduction to Frames. Natural Language Processing (NLP). Introduction to natural language understanding and various syntactic and semantic structures. Introduction to Expert Systems - characteristics, components, types, requirements, technology, development. Programming Languages for AI. Introduction to computer image recognition.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 316 Data Management (2 Units, Core: LH= 15; PH = 45) Senate—approved relevance

PAU's goal is to create competent and devoted professionals who can manage economic and financial data in order to prepare economists for the Nigerian environment, which is predicted to be one of the major economies in the future with enormous prospects for information and communication technology challenges and usage. Graduates in economics with a focus on data management are in line with the university's objectives. As a result, PAU economics graduates demonstrate their relevance by analyzing real-world issues using the fundamental principles of database management. The need for economics graduates who can perform well in data management professions demonstrates the course's significance.

Overview

Today, an increasing number of global agencies, corporate organisations and other stakeholders are requiring data producers to share, archive, and plan for the management of their data. In order to respond to these requirements, researchers and information professionals will need data management and curation knowledge and skills that support the long-term preservation, access, and reuse of data. Effectively managing data can also help optimize research outputs, increase the impact of research, and support open scientific inquiry.

This course is design to equip students with in-depth knowledge of data management. After completing this course, students will be equipped with the diversity of data and their management tools across different strata, identify the components of good data management plans, and be familiar with best practices for working with data including the organization, documentation, and storage and security of data. Students will also understand the impetus and importance of archiving and sharing data as well as how to assess the trustworthiness of repositories.

Objectives

- 1. explain the meaning and evolution of Information Management;
- 2. describe Information storage & retrieval;

- 3. explain Information capture and representation;
- 4. describe the introduction to database systems, components of database systems, and DBMS functions;
- 5. describe Database architecture and data independence;
- 6. describe database query language; and
- 7. describe database security and integrity; query processing and optimisation.

Learning Outcomes

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

- 1. describe the components of a database system and give examples of their use;
- 2. describe the differences between relational and semi-structured data models;
- 3. explain and demonstrate the concepts of entity integrity constraint and referential integrity constraint;
- 4. apply queries, query optimisations and functional dependencies in relational databases;
- 5. describe properties of normal forms and explain the impact of normalisation on the efficiency of database operations;
- 6. describe database security and integrity issues and their importance in database design; and
- 7. explain the concepts of concurrency control and recovery mechanisms in databases.

Course Contents

Information Management Concepts. Information storage & retrieval. Information management applications. Information capture and representation. Analysis and indexing - search, retrieval, information privacy. Integrity and security. Scalability, Efficiency and Effectiveness. Introduction to database systems. Components of database systems. DBMS functions. Database architecture and data independence. Database query language. Conceptual models. Relational data models. Semi-structured data models. Relational theory and languages. Database Design. Database security and integrity. Introduction to query processing and optimisation. Introduction to concurrency and recovery.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 317 Public Policy and Analysis (2 Units, Required; LH=30)

Senate-approved Relevance

Pan-Atlantic University is committed to ensuring that its economics graduates serve diverse communities by preparing ethical, transformational leaders who creatively and analytically inform public dialogue and manage policy through collaborative action. Thus, PAU economics graduates who are trained as public policy analyst demonstrate their relevance by being responsible for defining and framing public problems, identifying and evaluating possible strategies for addressing problems, and recommending solutions that make the most sense so as to achieve economic growth and development.

Overview

Public policy refers to the rules, regulations, and guidelines formulated by governments for the purpose of solving problems that have an impact on the society and the general public. Public policy analysis involves evaluating issues of public importance with the objective of providing facts and statistics about the extent and impact of the various policies of the government. The basic objective of public policy analysis is to assess the degree to which the policies are meeting their goals. Public policy analysis deals with the application of social science theories and methods to analyse matters of public importance.

This course is therefore designed to equip students with the understanding of the role that analysis plays in the policymaking process. The main focus of the course to introduce students to data driven public policy analysis tools and also equip them with the basic skills necessary to write and present professional policy papers.

Objectives

The objectives of the course are to:

- 1. describe the meaning of public policy analysis;
- 2. explain to student currency crises and debt crises;
- 3. explain the effectiveness of policies to support decision making;
- 4. describe the economics of climate change and how its impact of the environment;
- 5. state what drives convergence and divergence of income levels across countries; and
- 6. explain the theories of public policy and determinants of public policy.

Learning Outcomes

On completion of the course, students should be able to:

- 1. explain the meaning of public policy analysis and how effective are public policies in decision making process;
- 2. apply the various theories of public policy to the modern world and also domesticate it in their economy;
- 3. describe the models, theories, appropriate tools and techniques of Public Policy;
- 4. describe problems encountered in Policy Implementation and evaluation process;
- 5. interpret, and evaluate policy-relevant information. this includes the ability to distinguish fact from fiction, assess the accuracy and completeness of information, and identify the values and perspectives inherent in such information; and
- 6. explain the strength and limitations of policy analysis; describe the relationship between policy analysis, politics and the policy process in democracy as well as define a range of economic, social, organizational and political factors influencing policy.

Course Contents

Introduction to Public Policy Analysis. Active labour market policies. The effectiveness of policies to support peripheral regions. The effects of international economic integration. The patterns of long-run income and wealth inequality. The economics of climate change. Unconventional tools of monetary policy. Currency crises. Debt crisis. What drives convergence in income levels across countries. Theories of public policy. Stages of the 'policy cycle' (e.g. agenda-setting, implementation and evaluation). The determinants of public policy. Public opinion. Political parties. Corruption and policy learning.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 318 International Finance (2 Units, Elective; LH= 30)

PAU's goal is to create competent and devoted professionals who can provide solutions to international financing problems for the Nigerian environment and the world at large. Graduates in economics with a focus on international finance are in line with the university's objectives. As a result, PAU economics graduates demonstrate their relevance by committing to raising committed leaders who are knowledgeable of international investment, borrowing, and lending and its implication on the performance of their economy.

Senate-approved Relevance

Overview

Participating at the global value chain and gaining momentum in global trade is conditioned on global financial integration across countries to finance trade and investment seamlessly. The course thus introduces students to the theoretical underpinnings that constitute international finance and the nature and extent of monetary and financial relations between countries. The course introduces basic concepts of international macroeconomics such as the balance of payments and exchange rates, and arbitrage conditions. It then proceeds to analyze the impact of opening up the economy on the alternative macroeconomic policies available. The main factors that determine exchange rates between currencies, and the power of different models are also considered. Finally, the course explores topics in international finance including the benefits and drawbacks of fixed and floating exchange rates, the concept of a speculative attack, current account imbalances from an inter-temporal perspective, and how world macroeconomic imbalances affect international financial crisis and recent sovereign debt crisis

The course has both a theoretical and an applied emphasis in order to apply available theories into the real problems of the world economy. It does not analyze the detailed workings of international financial markets or questions related to firm financial management in international capital markets but students interested in these aspects can acquire basic foundations that are fundamental in understanding the context in which firms and governments work.

Objectives

- 1. explain the basic concept and the importance of studying international finance;
- 2. describe the international monetary system (IMS) and explain the major IMS exchange rate regimes from a historical perspective;
- 3. define exchange rate and explain the various exchange rate regime;
- 4. explain the foreign exchange (FX) market, its functions, and the various participant in the market;
- 5. describe the concept of purchasing power parity (PPP) and how it can be computed;
- 6. explain the concept of balance of payment (BOP) and the various approaches or theories of BOP; and
- 7. define the concept of foreign trade multiplier and demonstrate how it can be computed.

Learning Outcomes

On completion of the course, students should be able to:

- 1. define international finance and enumerate four (4) importance of international finance on businesses;
- 2. explain the four (4) IMS exchange rate regime- the Gold standard, the Bretton wood system, the European Monetary system (EMS), and the managed exchange rate regime;
- 3. use diagrams to demonstrate how the fixed, flexible and managed-float rate system works in an economy;
- 4. state five (5) functions of the FX market and enumerate four (4) key participants in the FX market and their respective roles.
- 5. calculate absolute PPP and relative PPP;
- 6. calculate the major components of BOP and elucidate the three (3) major approaches to BOP- the elasticity, absorption, and monetary approaches; and
- 7. calculate the foreign trade multiplier for an open economy.

Course Contents

Meaning of international finance. Relevance of international finance on business. International monetary system (IMS). The Gold standard. The Bretton wood system. The European monetary system (EMS). Models of monetary organizations. Exchange rate system. Foreign exchange market. Participant in the FX market. FX trading software. Purchasing power parity (PPP) theory. Balance of payments theory and policy. The elasticity approaches. The absorption approaches. The monetary approach. Components of the balance of payments. Foreign trade multiplier. Monetary integration.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO- 320 Advanced Mathematical Economics (2 Units, Elective; LH= 30)

Senate-approved Relevance

Pan-Atlantic University is committed to ensuring that its economics graduate devote time to quantitative oriented courses like mathematical economics that fosters in them the importance of quantitative techniques in economic analysis and its practical applications in our economic lives albeit inculcating in them the role of mathematics in advancing human knowledge and understanding.

Overview

Mathematics is recognised globally as an important aspect of quantitative techniques necessary for economic and public policy analysis. Mathematical economics involves the use of mathematical and statistical methods to analyze and model economic phenomena. Mathematical economics also involves linear and non-linear models, static and dynamic models, input-output analysis, general equilibrium analysis, mathematical programming, dynamic programming, optimal control theory, and game theory to gauging and driving economic decisions.

The course is designed to expose students to formulate and solve mathematical models of economic behaviour using a variety of techniques and tools. Students will also learn how to analyze the implications of these models, and to evaluate the strengths and limitations of the assumptions underlying them. By the end of the course, students should be able to apply their knowledge to analyze and solve complex economic problems, and to communicate their findings effectively in both written and oral form.

Objectives

The objectives of the course are to:

- 1. describe mathematical and statistical techniques and their applications in economic modeling and analysis;
- 2. explain linear and non-linear models, static and dynamic models, and explain how they can be applied in economic analysis;
- 3. describe input-output analysis and general equilibrium analysis, explaining the interdependencies of different sectors of the economy and the overall impact of economic changes on the entire economy;
- develop a thorough understanding of mathematical programming and dynamic programming techniques to find the optimal solution to economic problems under specific constraints;
- 5. describe optimal control theory with an emphasis on Bellman and Pantryag in approaches to determine the best control policy to maximize an objective function;
- 6. describe an appreciation for game theory and its applications in economics, particularly in analyzing strategic decision-making in situations where the outcome of one player's decision depends on the decision of another player; and
- 7. describe linear and differential equation systems and their applications in modeling complex economic phenomena and predicting future economic outcomes.

Learning Outcomes

On completion of the course, students should be able to:

- 1. use mathematical modeling to describe economic phenomena and analyze the relationship between different economic variables;
- 2. analyze and interpret complex economic data using mathematical and statistical techniques;
- 3. use input-output analysis and general equilibrium analysis to examine the interdependencies of different sectors of the economy and predict the overall impact of economic changes on the entire economy;
- 4. use mathematical programming and dynamic programming techniques to find the optimal solution to economic problems under specific constraints;
- 5. apply optimal control theory with an emphasis on Bellman and Pantryag in approaches to determine the best control policy to maximize an objective function;
- 6. use game theory to analyze strategic decision-making in situations where the outcome of one player's decision depends on the decision of another player; and
- 7. use linear and differential equation systems to model complex economic phenomena and predict future economic outcomes.

Linear and non-linear models to describe relationships between variables in the economy. Static models as a snapshot of the economy at a specific point in time, and dynamic models as applicable to changes in the economy over time. Input-output analysis to analyze the interdependencies of different sectors of the economy, and general equilibrium analysis to examine the overall impact of economic changes on the entire economy. Mathematical programming and dynamic programming to find the optimal solution to economic problems under specific constraints. Optimal control theory, with an emphasis on Bellman and Pantryag approaches, to determine the best control policy to maximize an objective function. Game theory to analyze strategic decision-making. Linear and differential equation systems to model complex economic phenomena and predict future economic outcomes.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 392 Professional and Personal Skills (2 Units, Required; LH = 30) Senate-approved relevance

The course equips students with a variety of skills that they need in order to attain the mission of the Pan-Atlantic university to "form competent and committed professionals and encourage them to serve with personal initiative and social responsibility the community in which they work, thereby helping to build a better society in Nigeria and Africa at large."

Overview

In order to appropriately resolve many challenges in today's world, there is a need to have professionals who are not only competent, but possess soft skills and other qualities which enrich interactions with their colleagues. The goal of our university education extends beyond obtaining technical skills and this course provides an opportunity for preparing students for personal and professional development and for service to the world.

This course teaches the meaning of professionalism and its practical implications for the student's chosen career path, while exposing the student to ways in which they can be of service to humanity. It teaches skills that will lead to personal effectiveness in the professional context and provides practical strategies for improving self-management and interpersonal relations. It will dwell on a range of skills which are useful in managing ordinary situations and difficult ones in both personal and personal situations. It will teach how to maintain a sense of purpose and direction under pressure and develop the confidence to manage a variety of people and circumstances. Through this course, the students will learn to make the most of all the personal resources at their disposal. They will be taught to harness their personal talents, energy and time, relative to what is most important, and then to channel the outcomes to achieve what is desirable.

Objectives

- 1. describe the professional and personal skills needed in order to be effective;
- 2. identify professional and personal situations in which the skills will be relevant and thus can be used currently and in the future;
- 3. describe the ways to attain those skills listed in the course content;

- 4. use exercises in applying professional and personal skills in different given scenarios; and
- 5. demonstrate some soft skills where applicable.

Learning outcomes

On completion of the course, students should be able to:

- 1. describe at least five elements of professionalism and their manifestations within their chosen career path;
- 2. write a personal CV and professional profile;
- 3. identify at least five ways in which their chosen career can be of service to communities;
- 4. identify at least three ways in which students can serve the university community;
- 5. identify at least three personal strengths, and at least strengths and five weaknesses associated with each of the four classical types of temperaments;
- 6. describe five elements of good interpersonal communications;
- 7. explain at least three differences between assertiveness and aggression;
- 8. describe at least five tips for financial responsibility and making good personal budgets.
- 9. describe appropriate actions and responses to at least four common medical emergencies; and
- 10. describe two types of good leadership and describe at least five guidelines for good teamwork.

Course contents

Professionalism. Job search: interviews, writing applications, CVs, resumes and professional profiles. Professional work as service to the community. Social responsibility. Self-knowledge. Self-esteem & assertiveness. Open-mindedness. Emotional intelligence. Temperaments, character development and personality. Interpersonal communications. Public speaking. Time management. Social etiquette. Cultivating optimal health: metal and physical. Personal budgets and financial responsibility. Leadership. Teamwork.

Minimum Academic Standard: A Classroom and Projector

400 Level

ECO 401: Advanced Microeconomics I (2 Units C: LH 30)

Learning Outcomes

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

- discuss confidently, issues in behavioural/optimization construct in consumer behaviour, investments, production and pricing/distribution under different market or cost structures, maximisation and minimisation framework;
- 2. explain the issues of equilibrium in single and multimarket situations, multiperiod consumption, investment theory of the firm and the role of time; and

discuss welfare economics issues within the context of efficiency or inefficiency in resource use under perfect and imperfect competitive situations, and optimality conditions.

Course Contents

Fundamental quantitative relationships, Recapitulation on partial/general equilibrium conditions. Consumer surplus, Slutsky and Hicks income/substitution effects. Consumer behaviour under uncertainty. Dynamic analysis and value theory production functions. Constrained profit maximisation, cost minimisation and profit functions. Duality in production. Production under uncertainty. Factor market equilibrium. The existence and uniqueness of equilibrium as well as the stability of equilibrium. Topics are determination of wages, rent, interest and profit. Optimisation in theories of consumption and production. It also includes the notion of economic efficiency. Efficiency and equity.

ECO 403: Advanced Macroeconomics I (2 Units C: LH 30)

Learning Outcomes

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

- 1. present a complete open economy model multiplier i.e. including the household, business unit, the government and the external sector;
- 2. discuss in detail, the theories of consumption and investments and relevant to emerging and developing economies; and
- explain the relevance of the IS-LM framework to macroeconomic policies; the
 appropriate macroeconomic theories and policies on consumption and investment for
 emerging and developing economies desirous of sustainable growth and
 development.

Course Contents

Basic model of income determination and extension from a simple closed economy to a four-sector economy with the derivation of the multipliers. Detailed theories of consumption (KIH, RIH, PIH & LCH) and investment (Accelerator theories, MEC, MEI, Profit Theory, Profit & Residual, Cash Flow and many others), (including under conditions of uncertainly) of the classical, Neo-Classical, Keynesian and Post-Keynesian economists; and the relevance of the theories to emerging and developing countries. The advanced treatment of the IS-LM framework within the context of government monetary and fiscal policies and in relation to output, employment, prices and inflation.

ECO 402: Advanced Microeconomics II (2 Units C: LH 30)

Learning outcomes

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

- advise businesses on optimal combinations of factors of production to achieve optimal output and maximise their profits;
- 2. advise on management of public resources to achieve citizen's welfare and externalities, including the use of game theory to solve welfare problems in emerging and developing economies; and
- 3. use game theory to solve welfare problems in emerging and developing economies.

Study of externalities as well as Social and private costs and Pareto Optimality Criterion. Social welfare functions are studied using Game theory and with applications relevant to developing economies. Theory of Games: Two-person, Zero-Sum games, Mixed strategies. Linear programming equivalence, cooperative games and the Nash Bargaining solution. Welfare economics: Pareto optimality for consumption, production and in general. Social Welfare Function and its determinants. Social preference and indifference. The Arrow Impossibility Theorem. Income distribution and equity. Relevance of the welfare economics to emerging and developing economies.

ECO 404: Advanced Macroeconomics II (2 Unit C: LH 30)

Learning outcomes

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

- 1. discuss growth models from neo-classical to modern theories of economic growth
- 2. identify employment models from the classical to Keynesian;
- 3. explain various theories of exchange rate and balance of payments under different exchange rate regimes;
- 4. prepare government macroeconomic policies and offer sound advice to public and private enterprises or organisation; and
- 5. carry out relevant research on macroeconomic policies as they affect emerging and developing economies, including Nigeria.

Course Contents

Growth Theories: Solow model and endogenous models of economic growth, inclusive growth model. Keynesian models of Income, employment and Prices. Taxation and Laffar curve, Debts and Ricardian equivalence. Capital theory, fiscal and monetary policy theories. Determination of wages, rent, interest and profit. Notion of economic efficiency; Efficiency and equity; the theories of foreign exchange and balance of payment, required adjustment techniques in balance of payment disequilibrium. The J-Curve and Marshall-Lerner condition for currency adjustments. Theories of Business Cycle. Macroeconomic policies, planning and optimal allocation of resources with particular reference to emerging and developing economies.

ECO 405: Economic Planning (3 Units C: LH 45)

Learning Outcomes

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

- 1. prepare short-, medium- and long-term plans with feedback mechanism for an economy;
- 2. discuss planning processes and policy formation given natural endowments including human resources;

- 3. compare national planning across economic blocs and relevance to economic development; and
- 4. discuss basic theories and policy issues on economic development.

The origins of planning and technical planning types include Input-Output model and planning performance. Rationale for planning. Objectives and policy formation. Component of Economic Planning: Objectives, Planning authority, Democratic character, comprehensiveness, Rational allocation of resources, Feasible policies and targets; and the Political economy. Types of planning: Planning by inducement; Planning by Directions; Physical and Financial Planning; Centralised and Decentralised planning; and Structural and Functional Planning. Planning machinery; the planning process; Planning decision models and Planning data. Plan implementation. Development planning in Nigeria and Africa – Agenda 2063. Issues in Development and Under-development.

ECO 406: Monetary Theory and Policy (3 Units C: LH 45)

Learning Outcomes

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

- 1. identify the theoretical foundation for monetary policy formulation;
- 2. discuss the nature and functions of money, its use as credit instrument and the policy measures that control its usage, circulation and transmission mechanism to achieve the stated objectives; and
- 3. explain roles money play in economic growth, employment of resources, stable prices and balance of payment equilibrium issues.

Course Contents

Recapitulation of the theories of demand for and supply of money, and interest rates. Theories of money and economic growth: McKinnon and Shaw, Gurley and Shaw, Polak and Boisselneut. Definition, Objectives and Tradeoffs in monetary goals. Targets of monetary policy. Indicators of monetary policy. Lags in monetary policy: Types and nature, Outcomes of monetary policy: Positive, negative & neutral. Factors considered in monetary policy formulation, Constraints to monetary policy efficacy. Issues in Economic Policies: Monetary Policy; Fiscal policy; Exchange rate; income policy; Effectiveness of Monetary & Fiscal Policy. Monetary Management in Nigeria: Monetary Policy Framework; Monetary Targeting; Inflation Targeting; Multiple Targeting. International Financial Institutions & International Liquidity: International Institutions: World Bank Group; IMF; African Development Bank Group.

ECO 407: Fiscal Policy and Analysis (3 Units C: LH 45)

Learning Outcomes

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

1. discuss issues on government sources of revenue, particularly various types/relevance of taxes and objects/structure of expenditure;

- 2. discuss issues on fiscal relationship between and among the federating units of the economy (fiscal federalism);
- 3. explain issues relating to national debts and its consequences for debt management and national development; and
- 4. discuss global debt issues, debt forgiveness and economic dependence and development.

Government revenues sources, particularly taxes, distinction between the taxation of income and taxation of capital. Personal Income Tax. The law and practice of income tax relating to individuals, exemptions, settlements, trusts, and estates. Company Tax – the principles and scope of company tax as well as small company provisions including definitions, computation and exemptions. Government expenditure: debt issues including Ricardian Equivalence and fiscal responsibility. Nigerian system of income tax administration. Structure and procedures, returns, assessments, appeal, postponement, collection, with reference to all necessary legislation. The role of the public sector and economic development is examined as well as analysis of selected public policies; special attention will be paid to the public service in Nigeria.

ECO 499: Research Project/Long Essay (6 Units C: PH 270)

Learning Outcomes

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

- 1. carryout a research successfully and write a report. the student can choose any research method, design, and statistics;
- 2. investigate issues within the context of subject matter of economics; and
- 3. write research report.

Course Contents

Students are guided through supervision by lecturers in the department to choose topics in core economic area. The long essay or research report contains introduction; Literature review containing conceptual, theoretical and empirical literature; Methodology, Data Estimation and Analysis, Summary, Conclusion and Recommendations and completed with References which are expected to be current and relevant.

SSC 401: Research Method II (2 Units C: LH 30)

Learning Outcomes

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

- prepare and present a research proposal;
- 2. collect and organize meaningful data;
- 3. conduct pilot study and write research report; and
- 4. apply appropriate statistics in data analysis.

Course Contents

Data collection and coding procedures. Analysis of data and relate these to the research objectives. Writing and discussing the research report.

PAU-ECO-408 Operation Research (2 Units, Elective; LH= 30)

Senate-approved Relevance

PAU's goal is to create competent and devoted professionals who can provide solutions to international financing problems for the Nigerian environment and the world at large. Graduates in economics with a focus on operations research are in line with the university's objectives. As a result, PAU economics graduates demonstrate their relevance by committing to raising committed leaders who are knowledgeable of managing resources for optimal output, maintaining better control, better decision making, increased business productivity and better coordination of business.

Overview

Individuals, government, and business organisations are daily faced with challenges that require deciding. Simple as it may appear, decision-making is not an easy task to perform. It is a complex course of action because it is associated with some risks since there is some uncertainty (however little it may be) about the consequences of such a decision. This course, therefore, is designed to equip the students with the skills to make an informed decision in response to a problem with barest the minimum risk.

The course deals with the use of mathematical models for planning of corporate and governmental activities. Most of the planning problems will consist of an economic objective which we want to maximize under scarce resources. Operations Research consists of: - limiting and defining the current problem, - formulating a mathematical model of the problem, - calculating an optimal solution of the model, -and finally interpreting and implementing the found solution. This course deals with both deterministic and stochastic problems, and they will be analyzed based on the following models and methods: Linear and nonlinear programming, integer programming, network models, simple queuing theory and simulation.

Objectives

The objectives of the course are to:

- 1. define the basic concepts of operation research and its usefulness to business;
- 2. explain the meaning of linear programming (LP) and the methods used in solving LP problems;
- 3. demonstrate to the students how to draw network analysis, determine the critical paths, and compute the floats;
- 4. explain inventory cost and how to calculate the basic economic order quantity (EOQ);
- 5. describe the concept of replacement and how best equipment can be replaced to minimize cost;
- 6. explain the concept of the transportation model and the various techniques for solving transportation problems;
- 7. describe the nature of assignment models and the method of solving assignment problems; and
- 8. explain the meaning of simulation and state the applications of simulation technique to business.

Learning Outcomes

On completion of the course, students should be able to:

- 1. define the concept of operation research and state the main stages of operation research;
- 2. use the two (2) main methods of LP- graphical and simplex methods to solve maximization and minimization problems;
- 3. sketch the network, determine the critical path, and compute the three (3) types of floats- total, free, and independent floats associated with the network;
- 4. calculate the main inventory control levels- reorder level, minimum level, and maximum level; and associated costs such as ordering cost and holding cost;
- 5. apply the individual replacement and group replacement policies in the case of sudden failure of equipment to minimize cost;
- 6. calculate the basic feasible transportation cost using the North-west corner method (NWCM), least cost method (LCM), and Vogel's approximation method (VAM);
- 7. solve assignment problems using the Hungarian method; and
- 8. use the Monte Carlo method to construct and run simple simulations.

Definitions, origin, and development of operations research. Usefulness and limitations of operations research. Modelling in operations research. Decision analysis. Mathematical programming – concepts formulation, analysis, and application of linear and non-linear programming. Dynamic, integer, and goal programming. Theory of games; two-person, zero-sum features and limitations. System models – system dynamics, advanced simulation. Queuing Theory and Application: Theory of Stochastic Process. Theory of Queues. Inventory and production control. Network analysis. Transportation model. Assignment model. Replacement analysis. Simulation

Minimum Academic Standard: A Classroom and Projector

PAU-ECO 409 Internship (3 Units, Core; PH = 135)

Senate-approved Relevance

With the goal of Pan-Atlantic University being to create competent and devoted professional, it is imperative to expose economics students to the world of work before graduation. Thus, Pan-Atlantic University is committed to ensuring that its economics students are exposed to experiential learning activities in a working environment as part of their training so as to have practical working experience and understand working ethics.

Overview

Internships are off-campus experiential learning activities designed to provide students with opportunities to make connections between the theory and practice of academic study and the practical application of that study in a professional work environment. Internships offer the opportunity to "try out" a career while gaining relevant experience and professional connections.

Internships are completed under the guidance of an on-site supervisor and a faculty sponsor, who in combination with the student will create a framework for learning and reflection. Forcredit internships are open only to students who have completed at least eight course credits, at least two of which are in a department related to the internship.

Objectives

The objectives of the course are to:

- 1. describe how economics coursework ties to professional careers of interest;
- 2. develop insight into a possible career path of interest while learning about the industry in which the organization resides, organizational structure, and roles and responsibilities within that structure;
- 3. develop professional connections and identify a strategy for maintaining those connections;
- 4. relate on the internship experiences;
- 5. relate what was learned and how it will be apply to your professional career goals;
- 6. identify professions that may be of interest as a result of this experience; and
- 7. identify additional skills that will need to be developed to ensure career readiness. This might include learning a new technology, developing a broader network, additional coursework, etc.

Learning Outcomes

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

- 1. demonstrate appropriate workspace behaviours in a professional setting;
- 2. describe 5 content knowledge appropriate to job function;
- 3. display evidence of increased content knowledge gained through practical experience;
- 4. describe the nature and function of the organization in which the internship experience takes place;
- 5. explain how the internship placement has enhanced their understanding of proposed career path; and
- 6. appraise the internship experience in terms of personal, educational and career requirement.

Course Contents

This is a practical course which involves supervised training work in a business enterprise. There shall be hands-on learning in all the functional areas of business. Integrating knowledge of the taught courses into the internship job experience. The requirements to complete internship are: final presentation, a daily log, an analysis of the company or organization the student worked for and a performance evaluation from the supervisor.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO- 410 Industrial Economics (2 Units, Required; LH= 30).

Senate-approved Relevance

The Pan-Atlantic University in its Pan-African philosophy is committed to grooming captains of industries who would lead the industrial development agenda in Nigeria and for Africa. Thus, PAU economics graduates prove their value by assisting in the decision-making processes so that the best option can be selected from the many accessible options. Additionally, it will make recommendations for resolving issues with risk and uncertainty brought on by unfavorable market conditions and shifting import and export regulations.

Overview

The importance of industrial development in and for Africa cannot be underscored as the effort towards the industrialisation of the continent has been ongoing since the July 1989 Africa industrialisation day declaration during the 25th A.U's Ordinary session of the African Heads of State in Addis Ababa. This has been re-emphasised in the AGENDA 2063, adopted in January 2015 by the Heads of State and Governments of the African Union for transforming Africa into the global powerhouse of the future through industrial development.

The knowledge of Industrial Economics as offered at the Pan-Atlantic University will enable graduates to contribute to Africa's industrialisation agenda, which is vital for sustained and inclusive economic growth, productivity, employment generation, economic diversification and reduction of exposure to external shocks. This course is designed to provide our esteemed students with a comprehensive understanding of the theory of Industrial Economics and its applicability in African countries. It would expose them to the framework and methods of industrialisation, the theory of firms and market structure, pricing and non-price strategies and public policy for industrial development in Africa.

Objectives

The objectives of the course are to:

- 1. explain the concepts, history, scope and methods of Industrial Economics;
- 2. describe the basic one-way causation framework analysis of Industrial Economics;
- 3. explain the neoclassical theory of the firm with a focus on profit maximisation ethically;
- 4. describe the tenets of the modern theories of the firm;
- 5. explain the measurements of market concentration with relevant examples;
- 6. describe practical applications of price and non-price strategies under the perfect and imperfect competition in Africa:
- 7. describe sources of industrial concentration, location and finance; and
- 8. explain the industrial and public policies that underscore the rationale, constraints and opportunities, and the way forward for industrial development in selected African countries.

Learning Outcomes

On completion of the course, students should be able to:

- 1. explain the concepts and identify three (3) methods of Industrial Economics;
- 2. identify the stages of the one-way framework analysis and modify it to close closely to reality;
- 3. state the assumptions of the neoclassical theory of the firm and illustrate the two (2) conditions for profit maximisation for firms;
- 4. identify at least three (3) modern theories of the firm and state their application to industrial development;
- 5. explain a minimum of four (4) non-price strategies under the perfect and imperfect competitions;
- 6. describe the determinants of industrial concentration and location, and identify five (5) main sources of finance for industrial development;
- 7. explain the industrial policies of selected African countries;
- 8. identify six (6) core constraints to industrialisation in Africa and suggest an actionable way forward for Africa's industrialisation agenda.

Introduction to industrial economics. Framework and methods of industrial economics. Theory of the firm and internal organization. Perfect competition. Monopolistic competition. Oligopolistic competition. Pure monopoly. The profit-Output determination under pure competition. The profit-Output determination under pure monopoly. The classical theory of Oligopoly Pricing. Cournot's Model. Bertrand's Model. Pricing strategies and practices of firms. Non-price strategies. The theory and practice of industrial location. Industrial concentration. The theory and practice of industrial finance. Industrial development in Africa. Public policies for industrial development in selected African countries.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO- 411 Political Economy (2 Units, Required; LH= 30)

Senate-approved Relevance

"To produce competent and committed professionals and inspire them to serve with personal initiative and social responsibility the community in which they work, so helping to establish a better society in Nigeria and Africa as a whole," reads the mission statement of Pan-Atlantic University. In order to help its economics students refresh their political consciousness and make wise political judgments that have an impact on the economy as a whole, Pan-Atlantic University is devoted to providing them with time in political economy.

Overview

Political economy is at the root of understanding the complex relationship between politics and economics, and how these forces shape the organization and functioning of societies. Through the study of political economy, students can gain a deeper understanding of the complex social and economic questions facing contemporary societies such as; How do different classifications of social systems and theories of social classes affect our understanding of power dynamics within societies? In what ways does Marxist theory of capital accumulation challenge mainstream economic thought on the distribution and allocation of resources? etc.

This course is designed to provide students with a deep understanding of Marxist approaches to economic and social analysis, and to enable them to critically analyze and evaluate economic and social phenomena from a Marxist perspective. The course exposes the students to the differences between bourgeois methods of analysis and dialectical methods, the historical materialist approach to studying society, the classification of social systems and the theory of social classes, the Marxist theory of capital accumulation and surplus value, and the different stages of capitalist development, including the emergence and advancement of capitalism, metropolitan and satellite economic relations, and the struggle against colonialism and neo-colonialism.

Objectives

- 1. explain the key principles and concepts of Marxist political economy;
- 2. describe an overview of the differences between bourgeois methods of analysis and dialectical methods;

- 3. analyze the historical materialist approach to studying society, including the classification of social systems and the theory of social classes;
- 4. describe the Marxist theory of capital accumulation and surplus value, which are central to understanding how capitalist economies function and the nature of class relations under capitalism;
- 5. explain the different stages of capitalist development, including the emergence and advancement of capitalism, the relationships between metropolitan and satellite economies, and the struggle against colonialism and neo-colonialism;
- 6. describe the emergence and advancement of socialist systems, including the differences between socialism and capitalism in terms of ownership, distribution, and allocation of resources; and
- 7. analyze and evaluate economic and social phenomena from a Marxist perspective, and to apply Marxist principles and concepts to real-world issues and problems.

Learning Outcomes

On completion of the course, students should be able to:

- 1. describe 5 key differences between bourgeois methods of analysis and dialectical methods, and be able to apply these different approaches to analyze economic and social phenomena;
- 2. apply the historical materialist approach to studying society and understand how different social systems have emerged and evolved over time;
- 3. demonstrate 4 understanding of the theory of social classes and be able to analyze how social relations and power structures shape economic outcomes;
- 4. analyze the Marxist theory of capital accumulation and understand how it shapes the economy and society, including the contradictions and crises that arise from the accumulation process;
- 5. describe the concept of surplus value and be able to analyze how it is extracted from labor in capitalist production, leading to exploitation and inequality;
- 6. analyze the different stages of capitalist development, including the emergence and advancement of capitalism, the differences between metropolitan and satellite economies, and the struggle against colonialism and neo-colonialism; and
- 7. demonstrate an understanding of the emergence and advancement of socialism, including the differences between socialism and capitalism in terms of ownership, distribution, and allocation of resources.

Course Contents

Basic distinguishing features of bourgeois methods of analysis and of dialectical methods. Historical materialism. Classification of social systems, theory of social classes. Marxist theory of capital accumulation. Surplus value. Stages of capitalist development: emergence and advancement of capitalism. Metropolitan and satellite economic relations; the struggle against colonialism and neo-colonialism. States of socialist development, emergence and advancement of socialism.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO- 413 Advanced Econometrics (2 Units, Elective; LH=15; PH=45)

Senate-approved Relevance

The goal of Pan-Atlantic University is to create competent, devoted professionals who are inspired to serve their communities with initiative and social responsibility. This will improve society in Nigeria and throughout Africa. Therefore, Pan-Atlantic University is dedicated to giving its economics students solid, industry-relevant training in the application of econometric methods when handling numerical and non-numerical data for the study and formulation of public policy.

Overview

So many economic discussions are based on emotions and most policy discourse are not scientific owing to no precise or empirical facts to such conclusions. Thus, econometrics employs the tools of economic theory, mathematics and statistical inferences to analyze economic phenomena to guide policy decisions from evidence-based rigorous data analysis. This involves organizing, analyzing and interpretation of data based on economic theory through a robust modeling approach to inform economic policy decisions and as well guide public policy analysis.

This course is designed to equip the students with recent econometric techniques and their applications in economic analysis and decision making. It will introduce the students to practical knowledge with econometrics softwares such as Eviews, Gretl, STATA and R in handling economic data and quantitatively analyze economics models with knowledge on applications to real life issues and interpretations.

Objectives

The objectives of the course are to:

- 1. describe the applications of matrix approach to classical linear regression analysis;
- 2. explain unit root and cointegration techniques to time series data analysis;
- 3. describe the use of dynamics models in time series data analysis;
- 4. explain the idea of simultaneous equation modeling;
- 5. describe the specification errors in economic modeling; and
- 6. explain panel data models and analysis.

Learning Outcomes

On completion of the course, students should be able to:

- 1. solve and apply the matrix approach to classical linear regression analysis;
- 2. apply unit root tests, single and multivariate cointegration tests to time series data analysis;
- 3. apply various dynamic models to time series data analysis;
- 4. explain the idea behind simultaneous equation modeling and apply it to data analysis;
- 5. identify and discuss the various specification errors in economic modeling; and
- 6. apply the Pooled OLS, fixed and random effect models to panel data analysis.

Review of Matrixes. Matrix algebra. elementary operations, Partitioned matrix. Trace of Matrix. Idempotent matrix. Vector of matrix. The Classical Linear Regression (CLR) Model (Matrix Approach). Assumptions of CLR model. CLR estimators. The Gauss Markov Theorem. Functional forms of Models. Hypothesis testing in CLR Models. Cointegration and Error Correction Models. Unit Roots and Spurious Regressions. Testing for Unit Roots. Testing for Cointegration: The EG Approach & The Johansen Approach. The Error Correction Model (ECM) and Other Cointegrating Approaches. Dynamic Econometric Models. Distributed Lag Models. Autoregressive Models. Simultaneous Equation Models. Identification Problem. Estimation of Simultaneous Equation Model. Specification Error. Introduction to Panel Data. Pooled OLS Model. Fixed Effect and Random Effect Models.

Minimum Academic Standard: A Classroom and Projector

PAU-ECO- 415 Petroleum & Energy Economics (2 Units, Elective; LH= 30).

Senate-approved Relevance

The Pan-Atlantic University is devoted to developing skilled and dedicated individuals who will support the growth of the energy sector, which is seen as one of the drivers of growth. As a result, Pan-Atlantic University is dedicated to making sure that its students spend time in energy economics courses that ensure their overall formation as people and cultivate in them a sense of service for looking into prospective solutions that can benefit humanity.

Overview

Petroleum & Energy Economics provides students with a comprehensive understanding of energy economics, its complexities, and its interaction with various other dimensions of the Nigerian economy. The course provides answers important answers to pressing issues in the Nigerian energy sector such as: What are the current challenges facing the Nigerian energy sector, and how can stakeholders address these challenges to ensure sustainable and reliable energy production and consumption? How has the Nigerian energy sector evolved over the years, and what are the major policy and regulatory changes that have affected the sector's growth and development?

The course introduces students to the basic principles of energy economics, the various factors that affect the energy sector, and the different multidimensional interactions of the energy sector. Students are taught how to analyze and forecast energy demand, as well as to analyze the energy balance information of different countries. The course also delves into the economic foundations of energy demand and introduces alternative approaches to energy demand analysis. The Nigerian energy sector is also studied as a case study, and students learn about the energy market in Nigeria and the roles of stakeholders in this market. The course explores the Nigerian energy sector's evolution, its current state, and its potential for growth and development.

Objectives

- 1. explain the fundamentals of energy economics, including the concepts of supply and demand, and how they relate to the energy sector;
- 2. identify the complex factors that impact the energy sector, including economic, political, and technological factors, and analyze their interactions;
- 3. analyze the energy demand in different sectors and forecast future demand based on various factors such as demographics, economic growth, and technology advancement;
- 4. explain the economic foundations of energy demand, including the price elasticity of demand and the impact of income on energy consumption;
- 5. evaluate alternative approaches to energy demand analysis, including bottom-up and top-down approaches, and their suitability for different contexts;
- 6. explain the structure and dynamics of the energy market in Nigeria, including the role of the government, private companies, and other stakeholders; and
- 7. analyze the challenges and opportunities in the Nigerian energy sector, including issues related to regulation, infrastructure, and sustainability.

Learning Outcomes

On completion of the course, students should be able to:

- 1. describe 5 fundamental concepts of energy economics and their application to the energy sector, including supply and demand, market structures, and pricing mechanisms;
- explain 7 complex factors that impact the energy sector, including geopolitical, environmental, technological, and socio-economic factors, and how they interact with each other;
- explain 5 energy demand analysis and forecasting techniques to assess future energy demand in different sectors, based on demographic, economic, and technological trends;
- 4. describe 5 economic foundations of energy demand, including the price elasticity of demand and the impact of income on energy consumption, and apply this knowledge to energy demand analysis;
- 5. analyze the Nigerian energy sector, including its structure and dynamics, the roles of different stakeholders, and the challenges and opportunities faced in the sector;
- 6. evaluate the Nigerian energy market, including its regulatory framework, market structures, pricing mechanisms, and market participants; and
- 7. analyze 3 policies and initiatives aimed at promoting sustainable energy development in Nigeria, and evaluate their effectiveness.

Course Contents

Introduction to Energy Economics. Complex Factors of the Energy Sector. Energy and Multidimensional Interactions. Energy Demand Analysis and Forecasting. The Energy System. Analysis of Energy Balance Information. Evolution of Energy Demand Analysis. Economic Foundations of Energy Demand. Alternative Approaches to Energy Demand Analysis. The Nigerian Energy Sector. Energy Market in Nigeria. The Roles of Stakeholders in the Nigerian Energy Market.

Minimum Academic Standard: A Classroom and Projector