

SCHOOL OF BUSINESS

Head of School

Dr. Adimuthu Ramasamy, Ph.D, (Madras University India), M.Phil-Management (Annamalai Uni, India), MCom (Annamalai, India), BCom (Bharathidasan Uni., India), B.Ed (Annamalai, India).

Accounting Section

Senior Lecturers

Dr. Viswa Nadham, Ph.D, (Com) (Nagpur University, India), MBA (Fin.) (Andhra University, India), MCom (Andhra University, India), BCom (Advanced Management accounting and Taxation).

Dr. Luis Alamil, PhD (BA) (University of St. Thomas, Philippines), MBA (University of St. Thomas, Philippines), BSc. Business Administration (University of St. Thomas, Philippines), CPA (PNG), Public Accountant (Institute of Public Accountants), Financial Accountant (Financial Accountants of Australia).

Lecturers

Mr. Bapa Bomoteng, EMBA, (UNITECH), BTBS (UNITECH), PG Cert. Std. Centred Teaching (UNITECH), Dip in Theo (CFNI Dallas, TX).

Mr. Matthew Kuusa

CMA (Australia), ASA (Australia); MCom (Hons) (University of Wollongong, Australia), BCom (Accountancy) (UNITECH).

Mr. Samson Tiki, MPhil (Accountancy) (QUT, Australia); MBus. Adv. (Accountancy) (QUT, Australia), BCom (Accountancy) (UNITECH), Dip. Comm (Accountancy) (UNITECH)

Ms. Anna Mali, M. Comm (Accountancy) (UNSW, Australia), BCom (Accountancy) (UNITECH), Dip. Comm (Accountancy) (UNITECH).

Mr. Tombe Nekents, B. Law (LLB, UPNG).

Technical Instructor

Ms. Emmy Kama, B. Law (LLB, UPNG).

Tutors

Ms. Jennifer Sigl, BCom (Accountancy) (Pacific Adventist Uni., PNG).

Mr. Lawrence Pano, BCom (Accountancy) (UNITECH), Dip. Com (Accountancy) (UNITECH).

Applied Economics Section

Professor

Prof. Sarath.W.S.B. Dasanayaka, Post Doctoral in Technology Management (Sheffield University UK), PhD. (Economics) (Erasmus University of Rotterdam, Netherlands), M.A. (Economics, IISS) (Erasmus University of Rotterdam, Netherlands), B.A. (Hons), Econometrics, (University. of Peradeniya, Sri Lanka).

Senior Lecturer

Dr. Akhilesh Chandra Prabhakar, PhD (Jawaharlal Nehru University, India), MPhil (Jawaharlal Nehru University, India), Meco (Bhagalpur University, India), BEcon (Hons.) (Bhagalpur University, India).

Lecturers

Dr. Londari Yamarak, PhD (Charles Sturt University, Australia), M. Econ (Waikato University, NZ), PG Dip Econ (Waikato University, New Zealand), PG Dip Education (UoG); B. Econ (UPNG).

Mr Gomi Gipe, M. Com (University of Wollongong, Australia), B. Econ (Hons) (UPNG).

Mrs Lulu Bokutoia Raymond, M. Econ (University of Queensland, Australia), PG Dipl Economic Policy Analysis Course (PNGNRI), B. Econ (UPNG).

Mr. Kale Kaupa, MSc (Econ) (University of Sriwijaya, Indonesia), B. Econ (UPNG).

Mr. Michael Theo, M. Econ (UPNG), B. Econ (UPNG)

Tutors

Mr Gebob Bayu, PG Dip in Education (UOG), B. Econ (UPNG).

Mr Rex Junior, B. Econ (Applied) (UNITECH)

Ms. Amanda Towi, B. Econ (Applied) (UNITECH)

IT Section

Professor

Prof. Zhaohao Sun, PhD, Bond University, Australia), MSc (TU Cottbus, DE), MSc (Hebei University, China), BSc (Hebei University, China), MACS (Snr, CP); MIEEE, MAIS.

Lecturers

Ms. Francisca Pambel, MIS (Australia National University, Australia), B. Com (Comm Computing) (UNITECH).

Mr. Ian Cosmas, MDSEM (UTS, Australia), Dip Comm (MACS), B. Com (Comm Computing) (UNITECH).

Mr. Paul Pinjik, MIT (CSU, Australia), Advance Cert. Computer Systems Analyst (Okinawa, Japan), PG Diploma in Education (UoG), BCom. Sc (UNITECH).

Mr. Rodney Naro, PG (Masters) (Southern Institute of Technology, New Zealand), B. Com (IT) (UNITECH), Dip. Com, IT (UNITECH).

Management Section

Senior Lecturer

Ms. Frieda Siaguru, MBA (James Cook, Australia), BCom (Management) (UNITEC), Cert IV in Training and Assessment.

Lecturers

Mr. Ken Konafo, M. Com (Marketing), University of Wollongong, Australia), BCom (Management) (UNITECH).

Mr. John Anis Ambelye, MBA (UPNG), B. Com (Accounting) (UPNG).

Mrs. Nancy Laena, EMBA (UNITECH), BCom (Management) (UNITECH)

Mr. David Kelvin, PG Cert. Student Centred Teaching (UNITECH), MBA (UNITECH), B. Com (Management) (UNITECH), Dip. Com Management (UNITECH), Dip. Bus. Studies (Lae Technical College).

Administrative Officer

Ms. Osolele Menggenang, B. Tech. in Communication for Development (UNITECH), Dip. TCD (UNITECH).

Senior Secretary

Ms. Alita P Sari, Office Etiquette UNITECH), Cert. Basic Secretarial (Mt Hagen Tech. College), Stenography (Goroka Tech. College).

Secretary

Ms. Nancy Yapai, Secretarial Etiquettes UNITECH), PNGUoT; Office Etiquette & Professionalism, PNGUoT; Cert. Basic Secretarial, Lae Tech.

Janitor

Mr. Killy Aina

Undergraduate Degree Programs

The School of Business consists of four sections, Accounting, Applied Economics, Information Technology and Management. Apart from the service courses, the School offers the following four-year academic programs leading to:

- (a) Bachelor of Business in Accounting
- (b) Bachelor of Business in Applied Economics
- (a) Bachelor of Business in Information Technology
- (b) Bachelor of Business in Management

These degree programs are designed to produce Accountants, Economists, information Technologists and Managers who will be able to pursue careers in industry, academia or government sectors...

The first year of each course is designed to form a common foundation upon which years 2, 3 and 4 of the separate professional options are based.

Entry requirements for undergraduate programs (any one of the following):

- i) **Accounting:** STAT-P total score+ 'C' in Math A or "B" in Math B + "B" in either L & L or Applied English + 'B' in Economics B + 'B' in Accounting.
- ii) **Applied Economics:** STAT-P total score+ 'C' in Math A or "B" in Math B + "B" in either L & L or Applied English + 'B' in Economics + 'B' in Business Studies.
- iii) **Information Technology:** STAT-P total score+ 'C' in Math A or "B" in Math B + 'B' in either L & L or Applied English + 'B' in any one of the following: ICT, Economics, Accounting or Business Studies.
- iv) **Management:** STAT-P total score+ 'C' in Math A + "B" in Math B + 'B' in either L & L or Applied English + 'B' in Economics + 'B' in Business Studies.
- v) All non-school leavers entering into Business Studies programs: as in school leaver requirements except that upon acceptance with the minimum requirement will do entry exams instead of STAT-P test.
- vi) Diploma Certificate from polytechnic or affiliated college with Credit grades in business related subjects are invited to do entry exams before entry.
- vii) Diploma from outer universities will be selected on case-by-case basis.

The School of Business is offering online degree programs through the Department of Open and Distance Learning (DODL) since the introduction of the Online Education Program (OEP) in 2022. The following courses are offered through the OEP;

- (i) Bachelor of Business in Accounting
- (ii) Bachelor of Business in Applied Economics
- (iii) Bachelor of Business in Information Technology
- (iv) Bachelor of Business in Management

Post graduate Degree Programs

The School also offers postgraduate degrees in Executive Master of Business Administration (EMBA) and Master of Business Administration (MBA).

Entry requirements for post graduate:

Entry requirement for the Executive Master of Business Administration is Bachelor's Degree in any field with above average grades from a recognized university and relevant work experience at the management level is required. In addition, the entry requirement for the Master of Business Administration is Bachelor's degree in any field with above average grades from a recognized university is required.

COURSE STRUCTURE

BACHELOR OF BUSINESS IN ACCOUNTING

First Year Code	First Semester Subject	Contact Hours	Credit
IS111	Introduction to Information and communication Technology	6	15
BM111	Introduction to Business Management	6	21
CD111	Professional Practice and Sustainable Development	6	15
MA114	Quantitative Methods I	6	20
		24	71

First Year Code	Second Semester Subject	Contact Hours	Credit
BM121	Business Law	6	20
AE121	Principles of Economics	6	20
AC121	Principles of Accounting	6	20
MA124	Quantitative Methods 2	6	21
		24	81

Second Year Code	First Semester Subject	Contact Hours	Credit
AC211	Financial Accounting I	6	20
AC212	Cost Accounting I	6	20
AC213	Introduction to Taxation	6	20
Electives			
BM211	Principles of Marketing	6	20
AE211	Microeconomic Theory and Applications	6	20
		24	80

*** Please note that the Section Head will determine electives available to the students.

Second Year Code	Second Semester Subject	Contact Hours	Credit
AC221	Financial Accounting II	6	20
AC222	Cost Accounting II	6	20
AC223	Accounting Information Systems	6	20
Electives			
IS212	End-User Computer Applications	6	20
CD227	Effective Communication Skills & Ethics in the Work Place	6	20
		24	80

*** Please note that the Section Head will determine electives available to the students.

Third Year Code	First Semester Subject	Contact Hours	Credit
AC311	Issues in Financial Accounting	6	20
AC312	Managerial Accounting I	6	20
AC313	Corporate Finance	6	20
Electives			
BM312	Public Administration	6	20
AC314	Administrative Law	6	20
		24	80

*** Please note that the Section Head will determine electives available to the students.

Third Year Code	Second Semester Subject	Contact Hours	Credit
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AC321	Government Accounting	6	20
AC322	Corporate Accounting	6	20
AC323	Managerial Accounting II	6	20
Electives			
BM323	Industrial Relations	6	20
AE321	Monetary Economics	6	20
		24	80

***** Please note that the Section Head will determine electives available to the students.**

Fourth Year Code	First Semester Subject	Contact Hours	Credit
AC411	Auditing & Assurance	6	20
AC412	Advanced Taxation	6	20
AC413	Financial Management	6	20
Elective			
AE313	Banking and Finance	6	20
AC414	Company Law in PNG	6	20
		24	80

***** Please note that the Section Head will determine electives available to the students.**

Fourth Year Code	Second Semester Subject	Contact Hours	Credit
AC421	Accounting Theory	6	20
AC422	Financial Risk Management	6	20
AC423	Project in Accounting	6	20
Elective			
IS422	Information Systems Management	6	20
BM221	Human Resource Management	6	20
AE423	International Trade and Finance	6	20
		24	80

***** Please note that the Section Head will determine electives available to the students.**

Bachelor of Business in Accounting Graduate Statement

This subject is specific to all Bachelor of Business in Accounting course. Each Business discipline will map subject learning outcome to its own CLOs and the graduate statement and capabilities that stem from those CLOs. Refer to each Business Program discipline for the relevant graduate statement.

Accounting Course Learning Outcome (CLO)

- CLO 1 Demonstrate knowledge of a systematic and coherent body of knowledge, and the underlying principles and concepts along the fields of professional accounting and finance business and professional services and consultancy and development of enterprise both in national and global context
- CLO2 Understand and Demonstrate knowledge of the development of both manual and electronic means that are associated with communication and problem-solving skills appropriate for practicing and rendering professional services and consultancies.
- CLO 3 Demonstrate academic skills and attributes that is necessary to undertake research, and comprehend and evaluate new information, concepts and evidence from a range of sources
- CLO 4 Demonstrate the ability to review, consolidate, extend and apply the knowledge and techniques learned in a professional context.
- CLO5 Demonstrate skills to build a foundation for developing self-directed and lifelong learning, interpersonal and teamwork skills appropriate to employment and/or further study which also usually involves major studies in which significant literature is available
- CLO 6 Understand the course contents of Business Commerce, accounting, finance, business law and taxation at a significant depth and progressively developed to a high level which provides the basis for post graduate study or seeking for professional title through established examinations as provided for by PNG regulatory body along the field of accountancy.

Graduate Attributes of PNG Unitech.

1. Lifelong learner
2. Critical thinker
3. Effective Communication
4. Cultural Modernist
5. Morally upright
6. Technologically Savvy

YEAR 1 SUBJECT SPECIFICATION

SUBJECT SPECIFICATION

Course	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Principles of Accounting
Subject Code	AC121
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 Lecture + 1Tut + 1Project)
Delivery Mode	On campus
Subject Coordinator:	TBA

Synopsis

This subject introduces students to the basic principles and concepts of accounting. It further discusses basic accounting process by looking at various basic accounting or book keeping documents and financial statements.

Subject Themes/Topics

#	Topics	Topic Details
1	Basic Concepts of Accounting	The basic concepts of bookkeeping - assumptions underlying accounting; the nature of transactions; the meaning of assets, liabilities, proprietorship, revenues, expenses; the Accounting Equation; preparation of simple Profit and Loss Statements and Balance Sheets. Internal Control and documentary evidence.
2	Analysis of transactions and the use of the General Journal	Ledger Accounts - posting from the general Journal, recording transactions, balancing accounts. The Trial Balance - preparing the trial balance; finding and correcting errors. Balance Day adjustments - the need for adjustments and the preparation and treatment of adjustments. Trading Enterprises - the concept of Gross Profit and the bookkeeping processes used for trading businesses.
3	Special Journal	Special Journal - the advantages of special journals, and preparation and use of them. Cash versus Accrual accounting, and Incomplete records. Control accounts and subsidiary ledgers for Accounts receivable and Accounts Payable - recording transactions in both the General ledger and the with the subsidiary ledgers. Petty Cash records. Bank Reconciliation statements, and the need for monthly bank reconciliations, and the preparation of the statements.
4	Final Reports	Final Reports - the Profit and Loss Statement, the balance Sheet and cashflow statement. Worksheets - another approach for preparing balance day adjustments and final reports.
5	Inventory Records	Inventory records - determining the cost of stock; the "lower of cost or market rule"; assigning cost to closing stock and COGS (specific identification, UFO, FIFO, weighted average methods); costs under a periodic inventory system; costs under a perpetual inventory system; incomplete records. Depreciation and fixed asset records - determining the cost of fixed assets; calculating depreciation charges using various methods; depreciation schedules; revaluation and disposal of depreciable assets.
6	Payroll Records	Payroll records - maintaining Employee History cards; calculating hours worked, gross and net wages; and taxation payable; preparing Wages sheets, Cash Analysis, and wage cheques; and maintaining Employee Earnings records.

7	Interpretation and analysis of Financial Statements	Interpretation and analysis of Financial Statements - calculations of various ratios to measure liquidity, profitability, and financial stability, and the interpretation of these ratios.
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Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Discuss the basic assumptions underlying accounting.
2. Explain the basic bookkeeping process, from initial transaction and related documentary evidence, through to final accounts.
3. Analyze and record business transactions into the appropriate accounting records, using the double-entry system.
4. Explain the need for, and prepare, adjusting journals on balance day.
5. Prepare end-of-year financial statements from given information.
6. Maintain Control accounts, and Subsidiary Ledgers, for Accounts Receivable and Payable.
7. Maintain records for Petty Cash
8. Prepare Bank Reconciliation Statements.
9. Keep records of inventory, using both the periodic and the perpetual inventory systems.
10. Calculate depreciation changes and maintain records for fixed assets.
11. Prepare payroll records.
12. Calculate various ratios in order to analyze Financial Statements in terms of liquidity, profitability, and financial stability.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes topics 1, 2 & 3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** this assignment is set to test the understanding and comprehension skills of themes cover in 4 and 5. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4 and 5. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This final assessment goes towards assessing students' ability to comprehend and apply the relevant theory and application of forms of business entities, ethics, relevant accounting systems and accounting principles and practices. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Texts

1. Wood, Horner, Business Accounting basics, Pearson, 2010
2. Bandara P.M.N, Introductory Accounting for Papua New Guinea, 2nd Edition, New Age (2008)

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Financial Accounting I
Subject Code	AC211
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 Lecture + 1Tut + 1Project)
Delivery Mode	On campus
Prerequisites	AC121
Subject Coordinator:	TBA

Synopsis

This subject provides students with an understanding of the accounting for various forms of organizations, particularly companies and the preparation and presentation of financial statements.

Subject Topics

#	Topics	Topic Details
1	Financial Statements &	a) Review the preparation of Trial Balance, b) Income Statements and Balance Sheets, c) Review and prepare relevant balance date adjustments.
2	Relevance of Preparation and dissemination of accounting docs.	a) Prepare accounting documents and reports relevant to Schools, branch office systems and pastoral entities.
3	Partnerships	a) Account for the formation of partnerships; b) Accounting for changes in partners' interests, retirements, dissolutions and conversion to other forms.
4	Company Accounting	a) Introduction to Company accounting, b) Introduce company formation, c) Profit determination and appropriation d) Conversion of a non-incorporated entity into a corporate business
5	Accounting for extractive industries	a) Introduce accounting for extractive industries. b) Financial Reporting for extractive industries

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Understand, appreciate and be able to explain the specific accounting requirements of various forms of business entities.
2. To demonstrate knowledge of presenting accounting reports for the various business entities and describe relevant accounting systems associated therewith; and.
3. To demonstrate the ability to explain important conventional accounting principles and practices underpinning the various actions taken.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%

3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes topics 1, 2 & 3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4 and 5. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4 and 5. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This final assessment goes towards assessing students' ability to comprehend and apply the relevant theory and application of forms of business entities, ethics, relevant accounting systems and accounting principles and practices. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbooks

1. Elliot & Elliott, Financial Accounting and Reporting, 18th Edition, Pearson, 2017.
2. Hoggett & Edwards, "Financial Accounting in Australia" edition 7th John Wiley and Sons (2010)

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Cost Accounting I
Subject Code	AC212
Duration	13 teaching weeks
Contact Hours	6 hours per week (4 Lecture + 1Tut + 1Project)
Credit Points	20
Delivery Mode	On campus
Prerequisites	AC121
Subject Coordinator:	Accounting Lecturer

Synopsis

This subject provides students with the basic understanding *and setting a basic* fundamental principles and objectives of cost accounting. It further introduces comparative broad understanding of the nature of Financial Accounting, Managerial Accounting and Cost Accounting concepts, principles and practices.

Subject Topics

#	Topics	Topic Details
1	Introduction to Cost Accounting	fundamental principles and objectives of cost accounting; nature of Financial Accounting, Managerial Accounting and Cost Accounting;
2	Corporate Organizations and Organization	a) Corporate Organizations and Organization Charts; b) Planning and Control;
3	Decision Making Process -	a) Decision analysis and implementation; b) functions of Cost Accounting officers – c) Controller and treasurer and Line and staff relationship.
4	Cost Accounting Concepts	a) Cost Accounting concepts, Classifications and Statements; b) Cost Objects, Cost, Expenses and loss; c) Cost Accounting information system; d) Classification of Costs; e) Flow of Costs in manufacturing firms; f) Cost of Goods and manufactured statement.
5	Planning and Control	a) Planning and control of material, Labor and factory overheads; b) Definitions and classification; Accounting for Materials, Labor and Factory Overheads; c) Methods of costing materials and valuation of inventory; d) Quantitative models for material planning and control; e) Methods of costing labor; Learning Curve; f) Accounting for payroll; g) Estimated factory overheads; Determination of Factory Overheads rates; h) Applied and Actual factory overhead; Allocation of Service Department costs to producing Departments.
6	Cost accumulation systems	a) Cost accumulation systems: Objectives; Period cost accumulation system; b) Introduction to Perpetual Cost accumulation system; c) The Factory Ledger and General Ledger; Job — Order Costing, Process costing.

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Understand the role and the significant characteristics of financial Accounting, Managerial Accounting and Cost Accounting in Business.
2. Describe how the management process, with focus on decision-making, is used for Planning, Organizing, Directing and control-ing manufacturing operations.
3. Establish a foundation on which to build an understanding of procedures, issues and applications of cost accounting that will be encountered in study of new areas.
4. Recognize the importance of product costing, prepare and maintain the records of Job Order Costing, and Process costing.
5. Prepare and maintain records of material inventories, Payroll, Factory Ledger and General Ledger.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2 & 3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4, 5 and 6. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4, 5 and 6. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1- 6. The exam contributes 50% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Text Book

1. Horngren, Charles T et al, Cost Accounting, Global Edition, 15th Edition, Pearson, 2014
2. Most & Lewis, Cost Accounting, Grid, (2009)

Reference

1. Horngren & Foster, Cost Accounting, Prentice-Hall, (2010).
2. Usry M.F., Hammer L.H., Cost Accounting, Planning and Control, 12th Edition, South-Western (2009).

Relevant Unitech Policies

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Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Introduction to Taxation
Subject Code	AC213
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 Lecture + 1 Tutorial + 1 Project)
Delivery Mode	On campus
Prerequisites	AC121
Subject Coordinator:	Accounting Lecturer

Synopsis

This subject provides students with an introductory knowledge to understand the income tax laws applicable to all the sources of income derived by individual residents or non-residents of PNG with specific emphasis on the taxation of wages & salary income and non-salary income, employment related benefits and allowances, termination payment, annual leave, long service leave, gratuity and superannuation. This subject covers all relevant and applicable Taxation theories and practice by Law in Papua New Guinea as administered by the Internal Revenue Commission (IRC).

Subject Topics

#	Topics	Topics Detail
1	Introduction to Taxation	a) General Introduction to income tax b) Introduction to income tax in PNG c) Aspects of liability to Income Tax
2	Assessable Income	a) Taxation of individuals b) General provisions of assessable income and allowable deductions
3	Salaries and wages taxation	a) Salaries and wages taxation in PNG
4	Personal income tax	a) Personal income tax in PNG b) Rebates & Credits Available to Taxpayers (Individuals) c) Sole Trader & Partnership Taxation,
5	Taxation & Assessments	a) Provisional Tax, and Returns, Assessments, b) Objections & Appeals of Tax Assessments.

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Define terms used in taxation and explain the income tax laws applicable to all the sources of income derived by individual residents or non-residents of PNG.
2. Identify and define assessable and non-assessable income.
3. Compute and account in light of LO1 and SLO2 taxation of wages & salary income and non-salary income,
4. Compute and account in light of SLO1 and SLO2, the employment related benefits and allowances, termination payment, annual leave, long service leave, gratuity and superannuation
5. Compute and account for personal income taxation; tax on individual income other than salary & wages, tax on sole proprietorship and tax on partnership business and tax on income from others (property, gain from wealth etc)

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes topics 1, 2 & 3 covered in the lectures. The test contributes 15% towards the final grade for the subject
- Assessment 3** **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4, and 5. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4, and 5. This Test contributes 15% towards the final grades of the subject
- Assessment 5** **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1- 5. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Text book / Reference:

1. Income Tax Act 1959 (as Amended)
2. O'Neil, E., *A Guide to PNG Income Tax*, Universal Press (2010)
3. *A Guide to PNG Income Tax*, latest edition, PNG IRC

Readings and Resources:

PNG Government Public Policy, Major Vision and Mission statements Vision 2050, MTDS and other relevant documents and Annual Budget Books containing the Income and Expenditure documents will be sources for updated references properly).

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Financial Accounting II (Application)
Subject Code	AC221
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 Lecture + 1 Tutorial + 1 Project)
Delivery Mode	On campus
Prerequisites	AC211
Subject Coordinator:	Accounting Lecturer

Synopsis

The subject prepares the students in the primary knowledge and skills in preparation, presentation and interpretation of financial statements and an understanding of the sources of financing and financial instruments.

Subject Topics

#	Topics	Topics Detail
1	Financial Statements Preparation	Preparation and presentation of financial statements Preparation and presentation of trial balance Preparation and presentation Income Statement, Preparation and presentation Balance Sheet, Preparation and presentation Cash flows statement.
2	Financial Statements Interpretation	Analyze and interpret published accounts and financial Statements
3	Legal requirements (Companies Act)	Explore and acquaint with the requirements of the Companies Act 1997 for preparing and maintaining financial records;
4	Accounting Procedures	The various sources and uses of finance and related accounting procedures; Acceptable Standards and practices
5	Financial Instruments	Understand and explain what financial instruments are.

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Prepare and present financial statements (including Trial Balance, Income expenses Statements, Balance Sheet, Cash flow and Owner's equity).
2. Analyze and interpret the financial statements (ref 1).
3. Understand and account for the sources and uses of financing business entities.
4. Understand financial instruments in relation to various business entities.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%

2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1	Assignment 1: this assignment is set to test the understanding and comprehension skills of themes cover in 1 and 2. This task contributes 10% towards the final grade for the subject
Assessment 2	Test 1: A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes topics 1 and 2 covered in the lectures. The test contributes 15% towards the final grade for the subject.
Assessment 3	Assignment 2: this assignment is set to test the understanding and comprehension skills of themes cover in 3, 4 and 5. This task contributes 10% towards the final grade for the subject.
Assessment 4	Test 2: This test covers the theoretical aspect of topics covered in the themes 3, 4 and 5. This Test contributes 15% towards the final grades of the subject.
Assessment 5	FINAL EXAM: This final assessment goes towards assessing students' ability to comprehend, ability to apply the relevant theory and application of forms of business entities, ethics, relevant accounting systems and accounting principles and practices. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Readings and Resources (Subject Textbook / Reference):

1. Elliot & Elliot, Financial Accounting and Reporting, 18th Edition, Pearson, 2017
2. Hoggett & Edwards, "Financial Accounting in Australia" edition 7th John Wiley and Sons (2010)

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Cost Accounting II
Subject Code	AC222
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 Lecture + 1 Tutorial + 1 Project)
Delivery Mode	On campus
Prerequisites	AC212
Subject Coordinator:	Accounting Lecturer

Synopsis

This subject provides students with an understanding of the practical application of cost accounting in the context of the managerial function of planning and control and decision making, in preparation towards the area of Managerial Accounting.

Subject Topics

#	Topics	Topic Detail
1	Direct and Absorption Costing	a) Meaning of Direct costing and Absorption costing; Income statement format; b) Advantages and disadvantages Converting from one costing method to the other; c) Journal entries for adjustments.
2	Cost Accumulation System:	a) Joint Product and By-product Costing - Nature of joint product; joint cost and split-off point; joint cost allocation procedures - b) Accounting for joint product; c) Accounting for By-Product; treatment for spoiled goods, defective goods, scrap and waste materials. d) Cost Behavior and Cost Estimation Methods: Relevant range; e) Linearity and cost functions; non-linearity and cost function; estimating methods - Linear equations; Account analysis, engineering approach, high - low approach and linear regression.
3	Decentralized Operations and Responsibility Accounting:	a) Concepts of organization; Grouping of activities, organization structure and responsibility reporting; Centralization verses decentralization; b) Responsibility accounting; Essentials of good performance reporting; controllable costs; cost of service departments.
4	Cost - Volume - Profit Analysis:	a) Importance of CVP analysis; Assumptions underlying CVP analysis; b) Profit Planning - break-even point, margin of safety, graphical approach, Evaluating changes; Contribution margin and CM ratio; c) Effects on sales mix; CVP analysis and taxes; Evaluation of fixed cost utilization with operating leverage.
5	Standard Costing:	a) Purposes and benefits of standard costing; Establishing standard costs - methods for establishing standards, Developing standards for direct materials, direct labor; standard cost variance for direct materials and direct labor; b) Variance analysis; Standard cost accounting procedure for materials and labor. c) Standard cost for factory overhead and related variances - setting the standards. d) Variance analysis - one variance, two variance, three variance and four variances; e) Standard cost accounting procedures for factory overhead; Disposal of variance;
6	Process costing - Standard Costing	a) Usefulness of standards; Computations under standard costing. b) Importance of goal congruence in an organization;

7	Forecast Statements: Budgeting	a) The purpose and benefits of budget; Limitations of budgeting; Structure of master budget; b) Developing the master budget; Control aspects of budgeting; basic considerations for non-manufacturing firms budget preparations. c) Cash budget; d) Budgeted income statement; e) Budget balance sheet and budgeted statement of cash flow.
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Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Understand the costing procedures and accounting for Joint Products and By-Products.
2. Prepare income statements using absorption costing or direct costing methods and explain the advantages and disadvantages of the two costing methods.
3. Understand how various costs behave in response to changes in level of business activities and cost estimation methods.
4. Explain advantages and disadvantages of centralized and decentralized structures of business organizations.
5. Assist in preparing Master Budgets.
6. Understand the importance of using standard costs in preparing budgets for manufacturing firms.

Assessment Tasks and Weightings – 50% Continuous and 50% Final Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2 & 3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4, 5 and 6. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4, 5 and 6. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1- 6. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 12 weeks of teaching as per the PNG National Qualification Framework.

Text Book

1. Horngren, Charles T et al, Cost Accounting, Global Edition, 15th Edition, Pearson, 2014
2. Most & Lewis, Cost Accounting, Grid, (2009)

Reference

1. Horngren & Foster, Cost Accounting, Prentice-Hall, (2010).
2. Usry M.F., Hammer L.H., Cost Accounting, Planning and Control, 12th Edition, South-Western (2009).

Readings and Resources:

Lecture notes and power point outlines will be uploaded to the Google classroom.

Tutorials tasks are set using Google. Students are encouraged to search Google as additional source of material.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Accounting Information Systems - Application
Subject Code	AC223
Duration	13 Teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 Lecture + 1 Tut + 1 Project)
Delivery Mode	On campus
Prerequisites	AC121
Subject Coordinator:	Accounting Lecturer

Synopsis

To provide students with an understanding as to how accounting software packages can be utilized as a tool for book keeping and accounting information from creation and setting up of a company, the establishing a chart of accounts, data entry and preparation of statement of financial accounts. On the completion of this subject the students will be able to use an accounting software package enabling use of computer application/software in accounting.

Subject Topics

#	Topics	Topics Detail
1	Introduction Accounting Information Systems	a. Accounting Information Systems b. Set up a company using the Easy Setup Assistant (ESA) c. Set up the general Ledger and create chart of accounts.
2	Creating of Chart of Accounts	a) Create an integrated accounting system for General Ledger, b) Create the Accounts Payable system, including system files entering company data required, and data for all vendors. c) Create an Accounts Receivable System including the sales tax codes. d) Create an integrated inventory system.
3	Bank Reconciliation and Payroll	a) Process cash transactions and perform bank reconciliation. b) Set up Payroll using the Payroll Program.
4	Assets Module	a) Set up Fixed Asset Manager and preparation of Depreciation Schedules.
5	Adjustment Journals and Financial Statements	a) Use MYOB program to do adjusting journal entries on balance day, b) Prepare Financial Statements
6	Financial Statement Ratio Analysis	a) Calculate various ratios in order to analyze financial statements in terms of liquidity, profitability, and financial stability

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Set up a Company
2. Maintain Control accounts in the General Ledger, and Subsidiary Ledgers, for Accounts Receivable and Payable, and set up Sales and Purchases journals.
3. Prepare petty cash and Bank Reconciliation,
4. Keep records of Inventory, using both the periodic and the perpetual inventory systems,

5. Calculate Depreciation and other Charges and maintain records of fixed assets,
6. Prepare payroll records,
7. Prepare adjusting journals on Balance Day and prepare end-of-year financial statements,
8. Calculate various ratios in order to analyze Financial Statements in terms of liquidity, profitability, and financial stability.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2, & 3 covered in the lectures. The test contributes 5% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4, 5 and 6. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4,5 and 6. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1-6. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Ring J. and Cheetham C. Introductory Computer Accounting - A Live Approach (Latest Edition)

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

YEAR 3 SUBJECTS SPECIFICATIONS

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Issues in Financial Accounting
Subject Code	AC311
Duration	13 Teaching Weeks
Contact Hours	6 hours per week
Credit Points	20(4 hrs lect + 1 hr tut + 1 hr project)
Delivery Mode	On campus
Prerequisites	AC221
Subject Coordinator:	TBA

Synopsis

To provide students with an understanding and the application of specific accounting principles into specific business transactions and activities that are being faced.

Subject Topics

#	Topics	Topics Detail
1	Introduction to Issues in Financial Accounting	Introduction of Course Materials and Topics Issues Issues related to Financial Accounting
2	Accounting for Leases	Leases (IAS 17)
3	Accounting for property, plant and equipment	Accounting for property, plant and equipment (IAS 16)
4	Construction Contracts	Construction Contracts (IAS 11)
5	Investment Property	Investment Property (IAS 40)
6	Agriculture	Agriculture (IAS 41)
7	Income Tax	Income Tax (IAS 12)

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Demonstrate an awareness of the strengths and limitations of conventional financial reporting problems.
2. Account for and construct statements for specific activities that comply with International Financial Reporting Standards, and generally accepted accounting practices for all forms of business enterprises.
3. Construct financial reports that comply with specific legislation for Business Groups, and Co-operatives, in Papua New Guinea.
4. Account for tax income taxes

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
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1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** this assignment is set to test the understanding and comprehension skills of themes cover in 1, 2, 3 and 4. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2, 3& 4 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** this assignment is set to test the understanding and comprehension skills of themes cover in 5, 6 and 7. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 5, 6 and 7. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1-7. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Text Book/Reference

- Henderson, S and Pierson, G, (2017). *Issues in Financial Accounting*. 16th Edition. Pearson

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy NQF Level 7
Subject Name	Managerial Accounting I
Subject Code	AC312
Duration	13 Teaching weeks
Contact Hours	6 hours per week
Credit Points	20(4 hrs lect + 1 hr tut + 1 hr project)
Delivery Mode	On campus
Prerequisites	AC222
Subject Coordinator:	TBA

Synopsis

To provide the students with an understanding nature and the purpose of Managerial Accounting, accounting information can be prepared, analysed and employed in a range of planning, control and decision-making situations. And to enable the student's skills and ability to assess the relevance, strengths and weaknesses of accounting information to make appropriate management decisions.

Subject Themes/Topics

#	Themes/Topics	Lecture Syllabus/Topics Detail
1	Introduction to Managerial Accounting	<ul style="list-style-type: none"> a) Contrasting Financial Accounting and Managerial Accounting. b) The role of the management accountant c) The business organization and the Managerial Accounting d) Planning, Organizing, controlling
2	Reports and Financial Statements	<ul style="list-style-type: none"> a) Understanding Managerial Accounting and Financial Statement b) Financial statement analysis Financial Ratios c) Cash flow analysis, and cost management concepts
3	Management Control System	<ul style="list-style-type: none"> a) Management Control System b) Responsibility Accounting c) Control & Planning d) Performance Evaluation e) Performance measurement
4	Management accounting concepts and techniques for planning and control	<ul style="list-style-type: none"> a) The nature and behaviour of costs. b) Cost & Operating Performance Cost estimation c) standard costs and operating performance measures
5	Cost & Operating Performance	<ul style="list-style-type: none"> a) Cost Volume Profit Analysis b) Cost-volume profit analysis: applications and limitations. c) The determination of standard costs.
6	Management Accounting & Decision making.	<ul style="list-style-type: none"> a) Long term & Short-term Decision making b) Budgeting tool of decision making c) Budgeting: definition and structure, sales budgeting, functional budgeting, cash budget, master budgets. d) Fixed and flexible budgeting for planning and control. e) Capital Budgeting f) Capital budgeting decisions

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Prepare and analyze accounting information;
2. Apply accounting information in a range of planning, control and decision-making situations;
3. Assess the relevance, strengths and weaknesses of accounting information to make appropriate management decisions.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 **Assignment 1:** this assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.

Assessment 2 **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes topics 1, 2 and 3 covered in the lectures. The test contributes 15% towards the final grade for the subject.

Assessment 3 **Assignment 2:** This assignment is a Term Paper & Research on the Managerial Accounting project. This task contributes 10% towards the final grade for the subject.

Assessment 3 **Test 2:** This test covers the theoretical aspect of topics covered in the themes 3, 4 and 5. This Test contributes 15% towards the final grades of the subject.

Assessment 5 **FINAL EXAM:** This final assessment goes towards assessing students' ability to comprehend, ability to apply the relevant theory and application of forms of business entities, ethics, relevant accounting systems and accounting principles and practices. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14 weeks semester with 13 weeks of teaching as per the PNG National Qualification Framework.

References/Text Book

1. Data S, Rajan M and Horngren C, T. (2017). *Cost Accounting: A Managerial Emphasis*. Global Edition. 16th Edition, Pearson Press.
2. Horngren C, T. et al. (undated). *Cost Accounting a Managerial Emphasis*. Prentice-Hall

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Corporate Finance
Subject Code	AC313
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20(4 hrs lect + 1 hr tut + 1 hr project)
Delivery Mode	On campus
Prerequisites	MA111 and MA112
Subject Coordinator:	TBA

Synopsis

To instill an understanding of finance by emphasizing the financial and economic environment that underlies financial management, and, an appreciation of the application of corporate finance concepts in the decision-making process to maximize the market value of owner's equity.

Subject Topics

#	Topics	Topics Detail
1	Introduction	a) Introduction to Corporate Finance;
2	Time Value of Money	a) Time Value of Money b) PV, FV, Interest rates
3	Working Capital	a) Working capital and short-term financial management
4	Source of Finance	a) Source and use of Finance
5	Capital Markets	a) Capital Markets

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Demonstrate awareness and understanding of compounding and discounting techniques;
2. Demonstrate an understanding of working capital and short-term financing options available to corporations;
3. Understand and sources and uses of various sources of finance, and determining the appropriate mix;
4. Demonstrate an awareness of capital markets and how they can be used.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%

4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2&3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4, 5 and 6. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4, 5 and 6. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1- 6. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14 weeks semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book &References

1. Beck, J., et al (2015). *Fundamentals of Corporate Finance*. Global Edition. 3rd Edition. Pearson
2. Beal, D., et.al (2015). A. *Introduction to Corporate Finance*. Wiley.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Administrative Law
Subject Code	AC314
Duration	13 Teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 hrs lect + 1 hr tut + 1 hr project)
Delivery Mode	On campus
Prerequisites	BM121
Subject Coordinator:	TBA

Synopsis

To provide students with an understanding of the statutory and case law in PNG, governing incorporation, existence, operation and liquidation of companies and, to familiarize them with the legal framework within which the company as well as its human agents must operate in order that their activities stay within the ambit of the law and to allow them to fully utilize the advantages that this “vehicle” of business brings to persons seeking to business in PNG.

Subject Topics

#	Topics	Lecture Syllabus/Topics Detail
1	Companies	a) Historical Background to Company b) Growth of the company and its nature, c) The advantages and disadvantages as a business organization
2	The Common Law	a) The common law rules, b) Doctrines and concepts relating to the company that were developed by the courts over time;
3	Incorporations	a) Requirements for incorporation, b) Method of and the concept of separate legal personality;
4	Companies	a) Capacity, powers and validity of a company's actions; b) Names and constitutions of companies;
5	Shares and Ownership	a. Nature of shares b. Issue of shares c. Distribution to shareholders d. Acquisition of shares.

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Incorporate a company with the attendant understanding of the creation of a corporation, its attributes, rights and responsibilities of those involved with it;
2. Identify the different types of companies and their respective advantages and disadvantages to different business situations;
3. Apply the principles of common law, as well as the provisions of the *Companies Act 1997*, and its regulations to business and related issues affecting the daily life of both national and multi-national corporations operating inside and outside PNG;
4. Give advice on, and assist, in matters relating to the day-to-day operations of a company;
5. Manage or assist in the management of a company according to law;
6. Keep proper accounts and records of a company in line with the requirements and standards set by the law.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%

3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.

Assessment 2 **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2&3 covered in the lectures. The test contributes 15% towards the final grade for the subject.

Assessment 3 **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4, and 5. This task contributes 10% towards the final grade for the subject.

Assessment 4 **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4 and 5. This Test contributes 15% towards the final grades of the subject.

Assessment 5 **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1- 6. The exam contributes 50% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14 weeks semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book &References

1. Colin, A. (2014). *Corporations Law*. Lexis Nexis Butter-worths, Chatswood, Australia.
2. Gordon, W. (2015). *Commercial applications of company law in New Zealand*. Auckland, New Zealand.
3. Roman T; Jackson J; and R, Woeller. (2002). *Corporations Law: Principles, Policy and Process*. Butter-worths, Sydney, Australia.
4. Government of Papua New Guinea (1997). *Companies Act*. Government Printing House. Port Moresby.
5. Government of Papua New Guinea (1998). *Companies Regulation*. Government Printing House. Port Moresby.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Government Accounting
Subject Code	AC321
Duration	13 Teaching weeks
Contact Hours	6 hours per week
Credit Points	20(4 hrs lect + 1 hr tut + 1 hr project)
Delivery Mode	On campus
Subject Coordinator:	TBA

Synopsis

The aim of this subject is to introduce students to identify, evaluate, understanding and broaden their knowledge on Government Accounting Theories, the Government Accounting Systems, Processes and Accounting practices undertaken in the Not-for-Profit Organization. The PNG Government Budgeting & Expenditure control, Accounting and record keeping, accounting controls & Systems and periodical Reporting in general according to the GAAP standards and under the Statutory and legal requirements.

Subject Themes/Topics

#	Themes/Topics	Lecture Syllabus/Topics Detail
1	Introduction to Government Accounting	a) Systems of Government b) PNG Government System c) Public & Private Sector in the Economy
2	Principles of Government Accounting	a) Commercial & Government Accounting b) Concepts & Terminologies
3	Fund Accounting (Government Accounting)	a) Cash Basis of Accounting b) Accrual Accounting c) Modified Accrual Accounting
5	PNG Government Budgeting	a) The Budget Appropriation b) Revenue Collection c) Budget expenditure d) Review and reporting (Income & expenditure)
6	Capital Expenditure in Government	a) Capital Expenditure b) PPP (Public Private Partnership concept)
7	Expenditure Recognition in Government Accounting	a) Revenue Recognition b) Commitments c) Expenditure Recognition
8	Compliance & Governance in PNG Government	a) Internal Control and Good governance b) The Office of the Auditor General c) Internal Audit role in Government

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Understand and appreciate the Fund Accounting System which is in use in the public sector.
2. To demonstrate knowledge of the various budgetary systems and to show how the legal and institutional

- provisions within the budgetary system affect the constituent funds and account groups.
- Understand the requirements of financial control and management that result from the differences imposed by a non-profit government unit as compared to a commercial accounting entity.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes topics 4 and 5 covered in the lectures. The test contributes 10% towards the final grade for the subject.
- Assessment 3** **Major Assignment 2:** This assignment is a Term Paper and Research on the Accounting System in operation within a Government Department and/or Agency. This task contributes 15% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 6, 7 and 8. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This final assessment goes towards assessing students' ability to comprehend, ability to apply the relevant theory and application of forms of business entities, ethics, relevant accounting systems and accounting principles and practices. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-weeks semester with 13 weeks of teaching as per the PNG National Qualification Framework.

References

- Ruppel W. (2010). Government Accounting- Made Easy. 2nd edition. John Wiley and Sons.
- Ruppel, W (2015). GAAP for Government. Wiley and Sons.
- PNG Government PFMA (Pubic Finance Management Act). (1999). Treasury Departments Annual Budget documents Vol. 1, 2, 3, 4 & 5

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Commerce in Accountancy (NQF Level 7)
Subject Name	Corporate Accounting
Subject Code	AC322
Duration	13Teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 hrs lect + 1 hr tut + 1 hr project)
Delivery Mode	On campus
Prerequisites	AC221
Subject Coordinator:	TBA

Synopsis

To provide the students with an understanding of accounting practices employed in corporate financial reporting, an awareness of their limitations, and to develop the students' abilities to employ these practices.

Subject Themes/Topics

#	Topics	Lecture Syllabus/Topics Detail
1	Introduction	The fundamental Corporate Accounting;
2	Financial Statements	Preparation and presentation of financial statements; Accounting for business combinations;
3	Financial Statements	Preparation of consolidated financial statements, and accounting for associates;
4	Foreign Currency	Accounting for foreign currency transactions and translation of foreign currency financial statements;
5	Disclosure Issues of Instruments	Recognition, measurement and de-recognition, and the presentation and disclosure issues of financial instruments
6	Corporate Reconstruction & Liquidation	Corporate reconstructions and liquidations. Valuation of Companies and Goodwill.

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Prepare financial statements for publication to comply with International Accounting Standards and understand the disclosure requirements.
2. Demonstrate an understanding of the preparation of business combinations and group accounting
3. Translate and account for foreign currency transactions and translate foreign currency financial statements
4. Demonstrate an awareness of the principles of corporate reconstruction and the documentation for corporate liquidations.
5. Understand the recognition, measurement and disclosure requirements of financial instruments
6. Apply the techniques of and purposes of valuation of the business enterprise.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%

4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2&3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** This assignment is set to test the understanding and comprehension skills of themes cover in 4, 5 and 6. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes4,5 and 6. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This students' ability to comprehend and apply the relevant theory and application of Public Sector and Government Accounting principles and practices covering themes 1- 6. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book /References

1. Leo and Hoggett (2009). Company Accounting in Australia, 8th Edition. Wiley.
2. Parket R.H. and Whittred, G. (2009). Consolidation Accounting in Australia: Concepts and Practice. Longman Cheshire.
3. Dagwell R (2011). Corporate Accounting in Australia. Pearson.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Managerial Accounting II
Subject Code	AC323
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 hrs lect + 1 hr tut + 1 hr project)
Delivery Mode	On campus
Prerequisites	AC312
Subject Coordinator:	TBA

Synopsis

To provide the students with an understanding nature and the purpose of Managerial Accounting, accounting information can be prepared, analysed and employed in a range of planning, control and decision-making situations. And to enable the student's skills and ability to assess the relevance, strengths and weaknesses of accounting information to make appropriate management decisions.

Subject Themes/Topics

#	Themes/Topics	Lecture Syllabus/Topics Detail
1	Introduction to Managerial Accounting	<ul style="list-style-type: none"> a) Contrasting Financial Accounting and Managerial Accounting b) The role of the management accountant c) The business organization and the Managerial Accounting d) Planning, Organizing, controlling
2	Reports and Financial Statements	<ul style="list-style-type: none"> a) Understanding Managerial Accounting and Financial Statement b) Financial statement analysis c) Financial Ratios d) Cash flow analysis, and cost management concepts
3	Management Control System	<ul style="list-style-type: none"> a) Management Control System b) Responsibility Accounting c) Control & Planning d) Performance Evaluation e) Performance measurement
4	Management accounting concepts and techniques for planning and control	<ul style="list-style-type: none"> a) The nature and behavior of costs. b) Cost & Operating Performance Cost estimation c) standard costs and operating performance measures
5	Cost & Operating Performance	<ul style="list-style-type: none"> a) Cost Volume Profit Analysis b) Cost-volume profit analysis: applications and limitations. c) The determination of standard costs.
6	Management Accounting & Decision making.	<ul style="list-style-type: none"> a) Long-term & Short-term Decision making b) Budgeting tool of decision making c) Budgeting: definition and structure, sales budgeting, functional budgeting, cash budget, master budgets. d) Fixed and flexible budgeting for planning and control. e) Capital Budgeting f) Capital budgeting decisions

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Prepare and analyze accounting information;
2. Apply accounting information in a range of planning, control and decision-making situations;
3. Assess the relevance, strengths and weaknesses of accounting information to make appropriate management decisions.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2 and 3. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes topics 1, 2 and 3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Assignment 2:** This assignment is a Term Paper & Research. This task contributes 15% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 4 and 5. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This final assessment goes towards assessing students' ability to comprehend, ability to apply the relevant theory and application of forms of business entities, ethics, relevant accounting systems and accounting principles and practices. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

References/Text Book

1. Data S, Rajan M, and C, T, Horngren. (2017). Cost Accounting: A Managerial Emphasis. Global Edition. 16th Edition. Pearson.
2. Horngren C. T., et al., (undated). Cost Accounting a Managerial Emphasis. Prentice-Hall.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

YEAR 4 SUBJECT SPECIFICATIONS

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Auditing & Assurance
Subject Code	AC411
Duration	13 Teaching Weeks
Contact Hours	6 hours per week (4 Lecture + 1 Tutorials + 1 Project)
Credit Points	20
Delivery Mode	On campus
Prerequisites	AC322
Subject Coordinator:	Accounting Lecturer

Synopsis

To provide students with clear perspective of today's audit environment with a focus on the practical application of the International Standards on Auditing and generally accepted accounting principles. The coverage of topics will include technical auditing procedures as well as conceptual framework of auditing. Emphasis is placed on financial statement audits conducted under the Corporations Law, though the principles considered are applicable to other types of audits.

Subject Topics

#	Topics	Topics Detail
1	The assurance framework:	<ul style="list-style-type: none"> a) Definition and overview of auditing b) Auditing and assurance framework; c) Conceptual need and demand for auditing services; d) The types of audits;
2	Governance and the auditor:	<ul style="list-style-type: none"> a) What is governance? The auditor and governance; b) Professional audits and independence of auditors c) Relationship between corporate governance and internal control; d) Internal controls in computerized environment; e) Nature and objectives of general controls;
3	Regulatory, legal and professional framework:	<ul style="list-style-type: none"> a) The role of auditing standards; b) The duties, rights and powers of an auditor under the Companies Act; c) Quality control; and the external auditor's liability; d) Audit risk and legal liability
4	Audit planning:	<ul style="list-style-type: none"> a) Audit process b) Overview of the examination and audit of financial statements; c) The auditor's report; d) Client evaluation and planning the audit; e) Audit risk assessment; and materiality and evidence gathering
5	Audit Evidence and Audit Risk	<ul style="list-style-type: none"> a) Evaluation and elements of internal control b) Aspects of materiality in testing c) Sampling and audit test d) Auditing EDP systems
6	Public Sector & Internal Audit	<ul style="list-style-type: none"> a) Public Sector Auditing b) Auditor General and its role in PNG c) Internal Auditors roles and responsibility
7	Contemporary Issues in Auditing and Assurance	<ul style="list-style-type: none"> a) Issues that affect role of professional accountants and auditors.

		b) Ethics and Cooperate governance c) Control and risk management d) Fraud and audit independence e) Narrowing audit expectation gap.
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Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Understand and explain the conceptual underlying theory of auditing.
2. Understand and interpret the regulatory, societal roles and responsibilities of the professional auditor.
3. Apply the principles, guidelines and techniques of modern auditing in compliance with Accounting and Audit practices.
4. Use statistical sampling in performing both substantive and compliance tests as well
5. as appreciating the impact of the computer on auditing.
6. Understand contemporary auditing and assurance issues pertaining to ethics, cooperate governance and professional practices.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 **Assignment 1:** this assignment is set to test the understanding and comprehension skills of themes cover in 1, 2, 3 and 4. This task contributes 10% towards the final grade for the subject.

Assessment 2 **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2, 3 & 4 covered in the lectures. The test contributes 15% towards the final grade for the subject.

Assessment 3 **Assignment 2:** this assignment is set to test the understanding and comprehension skills of themes cover in 5, 6 and 7. This task contributes 10% towards the final grade for the subject.

Assessment 4 **Test 2:** This test covers the theoretical aspect of topics covered in the themes 5, 6 and 7. This Test contributes 15% towards the final grades of the subject.

Assessment 5 **FINAL EXAM:** This students' ability to comprehend, understand and apply the relevant theory and application of Auditing and Assurance principles and practices covering themes 1- 7.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14 weeks semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book & References

1. Gill G.S. and Cosserrat G., “Modern Auditing in Australia, (Latest Edition), Wiley (2008).
2. Leung, P., Coram, P., et al, Modern Auditing and Assurance Services, (Latest Edition), Wiley, (2011)

Readings and Resources:

Lecture notes and power point outlines will be uploaded to the Google classroom. Students are encouraged to search Google as additional source of material.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Commerce in Accountancy (NQF Level 7)
Subject Name	Advanced Taxation
Subject Code	AC412
Duration	13 Teaching Weeks
Contact Hours	6 hours per week
Credit Points	20 (4 Lecture + 1 Tutorials + 1 Project)
Delivery Mode	On campus
Prerequisites	AC213 & AC311
Subject Coordinator:	Accounting Lecturer

Synopsis

To provide the students with an understanding of the general principles of income taxation as applied to individuals and different business and not for profit organizational entities where IRC (Internal Revenue Commission) performing a National duty of State to administer the tax laws in generation of revenues through the taxation system

Subject Themes/Topics

#	Themes/Topics	Lecture Syllabus/Topics Detail
1	Introduction to Taxation	Tax Law (IAS 12) Purpose of Taxation & Income Tax Application of Taxation to PNG and Non-residency Laws IRC determination of Taxation income
2	Taxation of Companies	Income Tax Assessment of Capital & Capital gain Income Assessable Provisions Allowable deductions Exempt Income Deductions - Provisions Deductions - Depreciations
3	Foreign Companies	Taxable Foreign Income Foreign Companies in PNG Foreign Companies remittance Tax Concessions with donor funds, grants, foreign aids
4	Tax administration of individuals	Personal Income Tax Taxation on residents and overseas income Taxation on employment benefits Tax on Lump-sums and retirement Taxation on non-salary income
5	Taxation of resource projects in PNG:	Taxation of mining, gas and petroleum projects. Specific tax incentives for business and industry Tax concessions and tax holidays
6	Income tax returns	Salaries & wages Tax Business Income returns Accounting for GST Preparation and submission of GST Returns
7	Goods & Services Tax	Taxable activities Exempt Goods & Services GST Registration Accounting for GST

8	Tax Administration	Employer & Employee obligations Tax returns under compliance rules Tax Returns and assessments Reporting and appeal process Tax Agents
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Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Understand the purpose and implications of taxation regimes in Papua New Guinea;
2. Explain how taxation can be applied as a policy tool to channel development into desired areas of the economy;
3. Understand and apply the Income Tax Act provisions for assessable income and allowable deductions;
4. Consider all aspects of taxation law and prepare income tax returns;
5. Understand and apply the tax administration requirements of individuals and companies.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2, 3 and 4. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2, 3 & 4 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Project:** This Project is set to test the understanding and comprehension skills of themes cover in 5, 6 and 7. Students will be required to write a literature Review on task implications in PNG to employees or resource projects. This task contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 5, 6 and 7. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This final assessment goes towards assessing students' ability to grasp, understand, comprehend and to apply the relevant theory and application of Taxation theories of taxation for Companies and individuals as applicable and relevant under Taxation Act 1959 and (as amended to date). The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book & References

1. Income Tax Act 1959, (as Amended)
 2. O'Neil, E., *A Guide to PNG Income Tax*, Universal Press (1995)
- All updated Taxation legislation, rules and implantation policy and interpretation can be accessed through the following websites.

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- o <https://kpmg.com.pg>
- o https://www.ey.com/en_gl/locations/papua-new-guinea
- o <https://www2.deloitte.com/au/en/papua-new-guinea>

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Financial Management
Subject Code	AC413
Duration	13 Teaching Weeks
Contact Hours	6 hours per week
Credit Points	20 (4 hrs Lect + 1hr Tut + 1 hr Project)
Delivery Mode	On campus
Prerequisites	AC313
Co-requisites	
Subject Coordinator:	Accounting Lecturer

Synopsis

To provide the students with a critical understanding of the theories and models developed to facilitate the financial management of organisations, and to assess the efficiency of such models, constructed in the first world, in the environment of a developing economy. To consider the role of institutions in the management of finance in a developing economy.

Subject Themes/Topics

#	Themes/Topics	Lecture Syllabus/Topics Detail
1	Introduction to Financial Management & Short-term financial management for the firm:	<ul style="list-style-type: none"> a) Financial Management in Organizations b) Current asset management, Inventory management c) Management of accounts payables & receivables d) Short & long-term financial Management e) Cash management f) International Financial Management
2	Fixed assets investment decisions:	<ul style="list-style-type: none"> b) The multidimensional approaches and the scope of coverage in Financial Management?
3	Financial Statements	<ul style="list-style-type: none"> a) Importance of Financial Statements & Financial Statements Analysis b) The multidimensional approach and the scope of coverage in Financial Management c) Group Project on Financial Statements and Annual Reports & FS & Ratios Analysis
4	Business Ethics and Corporate Governance in Financial Management	<ul style="list-style-type: none"> a) Business Ethics, Corporate Governance Responsibilities and Financial Management
5	Working Capital	<ul style="list-style-type: none"> a) Managing Cash and Marketable Securities b) Credit Management c) Inventory Management,
6	Cost of Capital & Budgeting Techniques	<ul style="list-style-type: none"> a) Capital Budgeting Techniques Project Cash flow & Risks (Modified Internal Rate of Return-MIRR) b) Cost of capital theory c) Cost of Debt

		d) Annuities and Cost of Capital
7	Fixed assets investment decisions:	a) Ddistortions to the free Market Optimal Investment Decision, b) Inflation and taxation c) Risk and uncertainty in the investment decision, d) Capital rationing, takeovers and mergers e) Leases;
8	Finance Institutions	a) Finance Markets & Finance Institutions in PNG b) Management of finance for the corporate entity c) Management of finance for the small business; d) Banks, Finance Institutions and Development banks.

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Employ the current practical methods used in making financial management decisions.
2. Assess the relevance of developments in financial management theory to an enterprise and employ theoretical models to make appropriate financial management decisions;
3. Select the techniques most appropriate to optimize the employment of resources including the most effective method of financing the acquisition of fixed assets;
4. Explain the operation of the financial systems, with particular reference to Papua New Guinea, and evaluate alternative sources of finance and assess investment opportunities;
5. Communicate the consequences of financial management decisions to accountants or non-accountants.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** this assignment is set to test the understanding and comprehension skills of themes cover in 1, 2, 3 and 4. This task contributes 10% towards the final grade for the subject.
- Assessment 2** **Test 1:** The test covers topics 1, 2, 3 & 4 covered in the lectures. The test contributes 15% towards the final grade for the subject.
- Assessment 3** **Project:** This project is set to test the understanding and comprehension skills of themes cover in 2, 6 and 7 using excel on Capital Budgeting and Techniques. This contributes 10% towards the final grade for the subject.
- Assessment 4** **Test 2:** This test covers the theoretical aspect of topics covered in the themes 5, 6 and 7. This Test contributes 15% towards the final grades of the subject.
- Assessment 5** **FINAL EXAM:** This final assessment goes towards assessing students' ability to grasp, understand, comprehend and to apply the relevant theory and application of financial theories and finance for the corporate entity with various cost of capital theory and application those theories. The Final Examination contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14 weeks semester with 13

weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book & References

1. Titman S, Keown A, Martin J, Financial Management: Principles and Applications, Global Edition, 13th Edition, Pearson, 2017
2. Weston J.F. and Brigham E.F., “Essentials of Managerial Finance”, 15th Edition, Dryden (2008).
3. Henderson, S and Pierson, G, *Issues in Financial Accounting*, 16th Edition, Pearson, 2017

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Accounting Theory
Subject Code	AC421
Duration	13 Teaching Weeks
Contact Hours	6 hours per week
Credit Points	20 (4 hrs Lect + 1hr Tut + 1 hr Project)
Delivery Mode	On campus
Prerequisites	AC221 & AC322
Subject Coordinator:	TBA

Synopsis

To impart an understanding of the conceptual framework and theoretical constructs that provide the rationale and the basis for contemporary accounting practice, and the source of reference for the critical evaluation of the practice. Students taking this course will demonstrate an understanding of the major theoretical concepts and principles in accounting and the source reference for the critical evaluation of the practice.

Subject Themes/Topics

#	Themes/Topics	Lecture Syllabus/Topics Detail
1	Introduction to theories of accounting	History of theory of accounting
2	Accounting measurement systems:	Measurement Theories definition Accounting measurement system Recognition and measurement of the elements of financial statements, revenue, expenses, assets, liabilities and equity.
3	Positive Theory of Accounting Policy and disclosure	Positive Theory of Accounting Policy General disclosure requirements
4	The principles underlying the preparation and presentation of financial statements:	IAS 1 Presentation of financial statements; IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors; IAS 10 Events after the balance sheet date; and IAS 37 Provisions, Contingent Liabilities and Contingent Assets
5	Positive Accounting Theory	Positive Accounting Theory
6	Immerging issues in Accounting	Immerging issues in Accounting & Auditing. Behavioral Accounting Social and environmental reporting
7	Standards	Standards Setting

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Demonstrate knowledge of the historical development of accounting practice and identify where current practices are theoretically deficient, and critically evaluate proposals for reform.
2. Demonstrate knowledge of significant practical initiatives that have been undertaken to reform accounting practice since the inception of the International Accounting Standards Board.
3. Construct financial reports on the basis of unified cash flows, current purchasing power accounting, current cost accounting, exit price accounting, continuously contemporary accounting, quantification of revenues, assets and liabilities, positive and normative theories of accounting, elements of financial statements
4. Define, recognize and measure the elements of financial statements

5. Understand and apply the general disclosure requirements of the IFRS.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1	Assignment 1: This assignment is set to test the understanding and comprehension skills of themes cover in 1, 2, and 3. This task contributes 10% towards the final grade for the subject.
Assessment 2	Test 1: A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1, 2, & 3 covered in the lectures. The test contributes 15% towards the final grade for the subject.
Assessment 3	Assignment 2: This assignment is set to test the understanding and comprehension skills of themes cover in 4, and 5. This task contributes 10% towards the final grade for the subject.
Assessment 4	Test 2: This test covers the theoretical aspect of topics covered in the themes 4 and 5. This Test contributes 15% towards the final grades of the subject.
Assessment 5	FINAL EXAM: This assessment will assess students' ability to comprehend, understand and explain the relevant accounting theories and application of accounting theories under the IASB principles, the IFRS and accounting measurement systems. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book & References

1. Godfrey, J., Holmes, S., Hodgson G., and Kam, V., Accounting Theory, 7th Edition Wiley, (Latest Edition).
2. IFRS. = International Financial Reporting Standards (as amended and revised).

Readings and Resources:

Lecture notes and power point outlines will be uploaded to the Google classroom. Students are encouraged to search Google as additional source of material.

Relevant Unitech Policies

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Subject Specification

Course(s)	Bachelor of Business in Accountancy (NQF Level 7)
Subject Name	Financial Risk Management
Subject Code	AC422
Duration	13 Teaching Weeks
Contact Hours	6 hours per week
Credit Points	20 (4 hrs Lect + 1hr Tut + 1 hr Project)
Delivery Mode	On campus
Prerequisites	AC313 & AC413
Subject Coordinator:	TBA

Synopsis

The aim of this subject is to develop students understanding of, and the skills required to apply, appropriate financial risk management strategies and tools to address an organization's financial risk.

Subject Themes/Topics

#	Themes/Topics	Lecture Syllabus/Topics Detail
1	Introduction	a. Introduction to financial risk management: b. ERM framework c. Financial Risks
2	Financing and Evaluating Investments:	a. Sources of funds for business b. Cost of capital and capital structure c. Capital budgeting techniques d. Derivatives
3	Management of liquidity, debt and equity	a. Cash flow management b. Working capital management c. Working capital and capital structure
3	Foreign Exchange and commodity price risk management:	a. Foreign exchange risk & foreign exchange risk management b. Commodity risk; soft commodities, Metals, Energy, Precious metals.
	Interest Rate Risk Management	a. Steps in interest rate risk Management
4	Accounting for derivatives and hedge relationships	a. Accounting concepts b. Hedge Accounting c. Hedge accounting under IFRS 9
5	Controlling risk	a. Risk management control framework b. Monitoring risk management policy c. Internal control framework d. Regulations e. Governance framework for financial risk management f. Operational risks g. Accounting disclosure requirements

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Analyze the sources of financial risk and the importance of implementing effective financial risk management procedures in business entities;
2. Analyze how futures and forward markets operate and be able to calculate theoretical forward and futures prices

- and values;
3. Analyze and apply a variety of hedging and trading strategies using options;
 4. Evaluate hedging strategies using forwards, futures, options and swaps to hedge identified financial risks in currencies, interest rates, commodities and shares and to evaluate the outcomes of these strategies;
 5. Evaluate the need for sound financial risk management policies and procedures in organizations and to make ethical decisions;
 6. Develop a Monte Carlo simulation to predict uncertainty of projects

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test 1	15%
3. Assignment 2	10%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 **Assignment 1:** this assignment is set to test the understanding and comprehension skills of themes cover in 1 and 2. This task contributes 10% towards the final grade for the subject.

Assessment 2 **Test 1:** A concept-based theory test based on basic understanding of general concepts, definitions and explanations relevant to themes /topics 1 & 2 covered in the lectures. The test contributes 10% towards the final grade for the subject.

Assessment 3 **Assignment 2:** this assignment is set to test the understanding and comprehension skills of themes cover in 3 and 4. This task contributes 10% towards the final grade for the subject.

Assessment 4 **Test 2:** This test covers the theoretical aspect of topics covered in the themes 3, 4 and 5. This Test contributes 10% towards the final grades of the subject.

Assessment 5 **FINAL EXAM:** This students' ability to critically analyze, comprehend and apply the relevant theory and application of financial risk management topics covered in the assessment period. The exam contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book

1. Allan. R, Dobeson. B, Humphrey. P, Kidd. J, Lamba. A.S, "Financial Risk Management" CPA Program, 2nd Edition, Deakin University (2016).

Relevant Unitech Policies

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Subject Specification

Course(s)	Bachelor of Commerce in Accountancy (NQF Level 7)
Subject Name	Project in Accounting
Subject Code	AC423
Duration	13 Teaching Weeks
Contact Hours	6 hours per week
Credit Points	20(4 hrs Lect + 1hr Tut + 1 hr Project)
Delivery Mode	On campus
Prerequisites	AC314
Subject Coordinator:	TBA

Synopsis

The general aim of the research Project in Accounting course is to enable students to carry out an independent research study on their own chosen topic in areas of accounting. Students will be guided to develop good research questions, develop sound design and analysis procedures, and give appropriate interpretation and meaning to the data. The objective of this course is to help students develop the sense of the art, craft and science associated with doing an effective research project.

Subject Topics

1. Introduction to the research process
2. Selection of the research topic
3. Introduction of the research study
4. Literature review
5. Research methodology
6. Data analysis and discussions
7. Conclusions and recommendations

Subject Learning Outcomes (SLOs)

On completion of this subject students will be able to:

1. Show an understanding of research design, methods, and strategies needed to conduct credible research;
2. Demonstrate skills in reading, interpreting, and critiquing past studies related to a particular research topic, and identifying their strengths and weaknesses;
3. Analyze and evaluate real-life data and information;
4. Plan and carry out a program of independent research with minimum supervision;
5. Draw conclusions and communicate their findings effectively.

Assessment Tasks and Weightings 100% Continuous Assessment

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Continuous assessment	100%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 Continuous assessment 100%: This is a semester long project where at the end of semester the project will be collect and marked. An oral examination on the report may be required as well.

Student Workload

The total workload for the subject for the 'average' student is a nominal 90 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book & References

1. Saunders, M.N. K., Research methods for business students, Pearson Education, Harlow, UK, 2016 or Latest Edition.

Relevant Unitech Policies

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COURSE STRUCTURE**BACHELOR OF BUSINESS IN APPLIED ECONOMICS**

First Year Code	First Semester Subject	Contact Hours	Credit
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IS111	Introduction to Information and communication Technology	6	15
BM111	Introduction to Business Management	6	20
CD111	Professional Practice and Sustainable Development	6	15
MA114	Quantitative Methods I	6	21
		24	71

First Year Code	Second Semester Subject	Contact Hours	Credit
AE121	Principles of Economics	6	20
BM121	Business Law	6	20
AC121	Principles of Accounting	6	20
MA124	Quantitative Methods 2	6	21
		24	81

Second Year Code	First Semester Subject	Contact Hours	Credit
AE211	Microeconomics	6	20
AE212	Quantitative Economics	6	20
AE213	International Economics	6	20
Electives			
BM212	Business Ethics & Corporate Governance	6	20
BM213	Entrepreneurship Development & Management	6	20
		24	80

*** Please note that the Section Head will determine electives available to the students.

Second Year Code	Second Semester Subject	Contact Hours	Credit
AE221	Macroeconomics	6	20
AE222	Business Statistics	6	20
AE223	Banking and Finance	6	20
Electives			
BM221	Human Resource Management	6	20
CD227	Effective Communication Skills & Ethics in the workplace	6	15
		24	75-80

*** Please note that the Section Head will determine electives available to the students.

Third Year Code	First Semester Subject	Contact Hours	Credit
AE311	Industrial Economics	6	20
AE312	Development Economics	6	20
AE313	Labour Economics	6	20
Electives			
BM312	Public Administration	6	20
CD314	Writing a Research Paper	6	15
		24	75-80

*** Please note that the Section Head will determine electives available to the students.

Third Year Code	Second Semester Subject	Contact Hours	Credit
AE321	Monetary Economics	6	20
AE322	Econometrics 1	6	20
AE323	Environmental Economics	6	20
Electives			
BM323	Industrial Relations	6	20
BM223	Sales Management	6	20

*** Please note that the Section Head will determine electives available to the students.

Fourth Year Code	First Semester Subject	Contact Hours	Credit
AE411	Advanced Microeconomics	6	20
AE412	Econometrics 2	6	20
AE413	Public Finance	6	20
AE414	Research Methods	6	20
		24	80

Fourth Year Code	Second Semester Subject	Contact Hours	Credit
AE 421	Macroeconomic Theory and Policy	6	20
AE422	Managerial Economics	6	20
AE423	International Trade and Finance	6	20
AE424	Research Project in Economics	6	20
		24	80

Graduate Statement

A SOB Graduate will have an in-depth knowledge in the field of Business and will demonstrate effective communication and collaboration skills, uphold the value of independence, innovation and entrepreneurship, display critical and professional judgment and a global and ethical understanding.

Applied Economics Course Learning Outcomes (CLO)

- CLO1 Demonstrate an understanding of and apply various economic theories, frameworks and models within the foundational and core disciplines of Economics, Business and Management at national, regional, and global economic or business situations.
Understand the impact of global issues, diverse world cultures and how they affect the adaption of business and economic practices to evolving global environment.
- CLO2 Apply the economics knowledge and skills derived from the different functional areas of economics such as statistics and mathematics to solve real-world business and economics problems.
- CLO3 Demonstrate ability to apply critical thinking and problem-solving skills when evaluating, analyzing, interpreting and applying business and economic information in particular business or economics context.
- CLO4 Develop competence in research, preparation and communication of business and economic information using various mediums of communication in team and as individuals.
- CLO5 Demonstrate an ability to recognize and identify ethical conflicts, apply ethical reasoning and assess ethical norms and values appropriate for a business and economics professional.

Graduate Attributes of PNG Unitech.

1. Lifelong learner
2. Critical thinker
3. Effective Communication
4. Cultural Modernist
5. Morally upright
6. Technologically Savvy

YEAR 1 SUBJECT SPECIFICATION

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Principles of Economics
Subject Code:	AE121
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4hrs L + 1hr T + 1hr Project)
Delivery Mode :	On campus
Subject Coordinator:	TBA

Synopsis

This course is an introduction to economic concepts and basic economic theory. It introduces the students to basic microeconomic and macroeconomic concepts, principles and models of economic theory. At microeconomics level, the course focuses students to the economic principles as they apply to behavioural activities of consumers and firms. Its emphasis is placed on basic economic principles involved in the determination of price, demand and supply, input and output decisions. At macroeconomics level it analyses aggregate economic activity in the national economy and its interrelationships with the rest of the world. Emphasis is placed on basic principles involved in the determination of the level of national output, the aggregate price level, and the money supply. Alternative explanations of key macroeconomic problems and relevant economic policies are compared. It equips students to use analytical techniques to hypothetical as well as real-world situations and to analyse and evaluate economic decisions and government policies at micro and macro level.

Subject Topics

Topics	Topic Details
1. The Science of Economics	1. Nature and Scope of Economics
2. Microeconomics Principles	Price Theory 2. Supply and Demand 3. Supply-Demand Applications Consumer Theory 4. Possibilities, Preferences, and Consumer Choices Firm Theory 5. Production and Costs Markets and Market Structure 6. Perfect Competition and its Limitations 7. Imperfect Markets and Market Failure
3. Macroeconomics Principles	Macroeconomic Issues 8. National Income and Output 9. Unemployment and Inflation 10. Long Run Economic Growth and Standard of Living Macroeconomic Policies 11. Government and fiscal policies 12. Money supply and monetary policies 13. Macroeconomic Policies and Determination of Aggregate Outputs 14. Policy Effects and Cost Shocks in the Aggregate Supply and Aggregate Demand Model
4. International Economics Principles	Macroeconomic Policy and International Trade 15. Financial Crisis, Stabilization and Deficits 16. Balance of Payments 17. Exchange Rates 18. International Trade, Comparative Advantage, and Protectionism

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Explain and demonstrate an understanding of basic microeconomic and macroeconomic concepts, principles and relationships;

2. Interpret and manipulate the basic microeconomic and macroeconomic data, graphs and models;
3. Analyse and apply the microeconomic and macroeconomics principles in solving hypothetical and real-world economic problems;
4. Analyse and evaluate how government policies affect microeconomic and macroeconomic outcomes;
5. Understand and evaluate the current debates about the choice of appropriate economic policies affecting economic agents such as households, firms, government and the world.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1	8 %
2. Test 1	17 %
3. Project 2	8 %
4. Test 2	17 %
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1:** An individual based project evaluating the understanding of students in microeconomics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic microeconomic concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in macroeconomics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of macroeconomic concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXMA:** This examination is an individual closed book exam examining the basic understanding and application of basic microeconomics and macroeconomics. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Case K., Fair R., S, Oster (2016). *Principles of Macroeconomics*, 12th edition, Pearson Education.
2. Stiglitz, J.E and C. E, Walsh (2006). *Principles of Microeconomics*, 4th edition, W.W. Norton and Co.

Relevant Unitech Policies

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YEAR 2 SUBJECT SPECIFICATIONS

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Microeconomics
Subject Code:	AE211
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hours lectures+ 1-hour tutorials + 1hour-Project)
Delivery Mode :	On campus
Prerequisites:	AE121, MA114
Subject Coordinator	: TBA

Synopsis

This course studies the allocation of scarce resources among competing end uses. It is an intermediate-level analysis of the economic behaviour of individual units, in particular consumers and firms. Although the focus is on perfectly competitive markets, attention is also given to other types of markets. The analysis also includes concepts of expected utility and uncertainty, and welfare economics.

Subject Topics

Topics	Topic Details
1. Consumer Theory	1. Demand and Supply (Perloff: Chapter 2) 2. Consumer Preference and Utility (Perloff: Chapter 3) 3. Consumer Choice and Demand (Perloff: Chapter 4)
2. Producer Theory	4. Firms and Production Functions (Perloff: Chapter 6) 5. Output and Cost Minimisation (Perloff: Chapter 7)
3. Markets and Firm Behavior	6. Competitive Firms and Markets (Perloff: Chapter 8) 7. Monopoly (Perloff: Chapter 11) 8. Pricing and Advertising (Perloff: Chapter 12) 9. Game Theory & Strategic Behaviour (Perloff: Chapter 13) 10. Oligopoly & Monopolistic Competition (Perloff: Chapter 14)
4. Markets and Market Failure	11. Uncertainty and Risk (Perloff: Chapter 16) 12. Asymmetric Information (Perloff: Chapter 18)

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Know the basic principles of microeconomics;
2. Understand the building blocks that underpin demand and supply, models of market structure and models involving externalities and public goods;
3. Be familiar with the structure of economic models;
4. Be able to derive solutions to a wide range of economic models;
5. Be able to describe and discuss their results;
6. Be acquainted with the application of the models to real-world situations.

Assessment Tasks and Weightings (50% Continuous and 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1	8 %
2. Test 1	17 %
3. Project 2	8 %
4. Test 2	17 %
5. Examination	50 %

TOTAL	100 %
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Students must also refer to the Subject Assessment Details.

Assessment 1	Project 1: An individual based project evaluating the understanding of students in microeconomics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight per cent (8%) of the total percentage points.
Assessment 2	Test 1: This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic microeconomic concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
Assessment 3	Project 2: The second project will also be an individual based project. It will be used for evaluating the understanding of students in macroeconomics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight per cent (8%) of the total percentage points.
Assessment 4	Test 2: This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of macroeconomic concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
Assessment 5	FINAL EXAM: This examination is an individual closed book exam examining the basic understanding and application of basic microeconomics and macroeconomics. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Perloff, J, M (2011). *Microeconomics with Calculus*, 2nd Edition, Pearson Education.

References

1. Nicholson, W (2004). *Intermediate Microeconomics and Its Application*, 9th edition, Thomson South-Western.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name:	Quantitative Economics
Subject Code:	AE212
Duration:	13 teaching weeks
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hours lectures+ 1-hour tutorials + 1hour-Project)
Delivery Mode:	On campus
Prerequisites:	First year AE pass all subjects
Subject Coordinator:	TBA

Synopsis

The study of this course enables the student to understand and apply mathematical approach to solving economic problems. It provides grounding in the quantitative methods of economic analysis with application to commonly used formal models in microeconomics, macroeconomics and econometrics. The emphasis will be on the unifying structure of the theory with a systematic treatment of the mathematical techniques involved.

Subject Topics

No.	Topics	Topic Details
1	Economic Models	<ul style="list-style-type: none">• The Nature of Mathematical Economics• Economic Models
2	Static (Equilibrium) Analysis	<ul style="list-style-type: none">• Equilibrium Analysis in Economics• Linear Models and Matrix Algebra
3	Comparative-Static Analysis	<ul style="list-style-type: none">• Comparative Statics and the Concept of Derivative• Rules of Differentiation and Their use in Comparative Statics• Comparative-Static Analysis of General-Function Models
4	Optimisation Problems	<ul style="list-style-type: none">• Optimisation• Exponential & Logarithmic Functions• Optimisation with More Choice Variables & Equality Constraints
5	Dynamic Analysis	<ul style="list-style-type: none">• Economic Dynamics and Integral Calculus• Continuous Time Differential Equations• Discrete Time Differential Equations
6	Mathematical Programming	<ul style="list-style-type: none">• Linear Programming• Non-Linear Programming

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understand how to use Algebra, Equations and Functions to represent economic relationships.
2. Understand and apply Differentiation and Integration functions to solve economic problems.
3. Understand and apply optimization functions to solve economic problems.
4. Understand and apply Matrix Algebra, Linear and Nonlinear Programming to solve economic problems.
5. Understand how to apply the different tools of Mathematics to solve economic problems.

Assessment Tasks and Weightings (50% Continuous and 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1	7.5 %
2. Test 1	17.5 %
3. Project 2	7.5 %
4. Test 2	17.5 %
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** An individual based assignment evaluating the knowledge and understanding of students in descriptive statistics, probability and sampling distribution to be completed in a period of two weeks will be given in week 4 and students to submit their completed project in week 6 of the semester. The assignment will comprise 7.5% of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in descriptive statistics, probability and sampling distribution. The test will be given in week 7 and will comprise 17.5% of the total percentage points.

- Assessment 3** **Assignment 2:** An individual based assignment evaluating the knowledge and understanding of students in statistical estimation, statistical testing and regression analysis to be completed in a period of two weeks will be given in week 10 and students to submit their completed project in week 11 of the semester. The assignment will comprise 7.5% of the total percentage points.
- Assessment 4** **Test 2:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in statistical estimation, statistical testing and regression analysis. The test will be given in week 12 and will comprise 17.5% of the total percentage points.
- Assessment 5** **FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will be assessing the knowledge, understanding and application of business statistics. The exam will be given in week 15 and will make up 50% of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Strom, S. H, and Carvajal (2016). , Essential Mathematics for Economics, 5th Edition, Pearson Education Limited.

References

1. Carl P. Simon and L, Blume (2016). Mathematics for Economics, 5th Edition, Pearson Education Limited.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name:	International Economics
Subject Code:	AE213
Duration:	13 teaching weeks
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hours lectures+ 1-hour tutorials + 1hour-Project)
Delivery Mode:	On campus
Prerequisites:	First year AE pass all subjects
Subject Coordinator:	TBA

Synopsis

The study of this course enables the student to understand the core principles of International Trade and Finance. This course is taught in two parts. The first component deals with international trade and emphasises absolute and comparative advantages, standard trade models, trade policy instruments, and trade agreements. The second component deals with international finance, and emphasises balance of payments accounting, foreign exchange markets, theories of exchange rate determination, and macroeconomic aspects of international finance. It is designed to help the student with the knowledge of international trade and finance in the macro economy.

Subject Topics

No	Topics	Topic Details
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1	The Theory of International Trade	<ul style="list-style-type: none"> • Comparative Advantage and Factor Proportions • Gains and Who Loses from Trade • Alternative Theories of Trade
2	Trade Policy	<ul style="list-style-type: none"> • Tariff and Nontariff Barriers to Trade • Trade Protection vs Trade Promotion • Trade Blocs and Trade Blocks • Trade Policies for Developing and Transition Countries • Multinationals and Migration: International Factor Movements
3	Understanding Foreign Exchange	<ul style="list-style-type: none"> • The Foreign Exchange Market • Forward Exchange and International Financial Investment • Determinants of Exchange Rates • Government Policies toward the Foreign Exchange Market • International Lending and Financial Crises
4	Macroeconomic Policies for Open Economies	<ul style="list-style-type: none"> • How Open Macro economy Works • Internal and External Balance with Fixed Exchange Rates • Floating Exchange Rates and Internal Balance

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. analyse the basic economics of international trade;
2. explain principle of comparative advantage and how free trade between countries can benefit all, and under what conditions;
3. outline and discuss the major instruments of trade policy such as tariffs and subsidies and how their economic effects can be analysed;
4. Understand and explain the role of the WTO in world trade, and discuss the trade issues at stake in the current WTO negotiations and their possible failure, with special emphasis on implications for PNG's trade interests;
5. Discuss the special features of the economic effects of free trade agreements (FTAs) and other types of preferential trade agreement;
6. calculate the balance of payment account
7. Understand and explain how the foreign exchange market works.

Assessment Tasks and Weightings (50% Continuous and 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	7.5%
2. Test 1	17.5%
3. Assignment 2	7.5%
4. Test 2	17.5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** An individual based assignment evaluating the knowledge and understanding of students in descriptive statistics, probability and sampling distribution to be completed in a period of two weeks will be given in week 4 and students to submit their completed project in week 6 of the semester. The assignment will comprise 7.5% of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in descriptive statistics, probability and sampling distribution. The test will be given in week 7 and will comprise 17.5% of the total percentage points.
- Assessment 3** **Assignment 2:** An individual based assignment evaluating the knowledge and understanding of students in statistical estimation, statistical testing and regression analysis to be completed in a period

of two weeks will be given in week 10 and students to submit their completed project in week 11 of the semester. The assignment will comprise 7.5% of the total percentage points.

Assessment 4 **Test 2:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in statistical estimation, statistical testing and regression analysis. The test will be given in week 12 and will comprise 17.5% of the total percentage points.

Assessment 5 **FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will be assessing the knowledge, understanding and application of business statistics. The exam will be given in week 15 and will make up 50% of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Thomas A. Pugel, 2017, International Economics, 17th edition, McGraw-Hill.

References

1. Dennis R. Appleyard, Alfred J. Field, Jr. (2014) International Economics, 8th Edition, McGraw-Hill.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Macroeconomics
Subject Code:	AE221
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hours lectures + 1-hour tutorials + 1-hour Project)
Delivery Mode :	On campus
Prerequisites:	AE211, AE212
Subject Coordinator:	TBA

Synopsis

This course introduces the dynamic micro foundations of macroeconomics, and demonstrates how students can utilize these foundations to understand the trends and fluctuations of macroeconomic aggregates like national output, unemployment, inflation and interest rates; and predict the outcome of alternative government policies related to current economic problems of Papua New Guinea and the rest of the world. It equips students with a knowledge base incorporating the central issues and models of macroeconomics and aids in the development of analytical skills required for the application of the theory to real-world problems in Papua New Guinea and the world.

Topics	Topic Details
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1. Introduction	<ul style="list-style-type: none"> • The Science of Macroeconomics (Chapter 1) • The Date of Macroeconomics (Chapter 2)
2. Classical Theory: The Economy in the Long-Run	<ul style="list-style-type: none"> • Measuring National Income (Chapter 3) • Money and Inflation (Chapter 4) • The Open Economy (Chapter 5) • Unemployment (Chapter 6)
3. Growth Theory: The Economy in the very Long-Run	<ul style="list-style-type: none"> • Economic Growth: Capital Accumulation and Population Growth (Chapter 7) • Economic Growth: Technology; Empirics and Policies Chapter 8)
4. Business Cycle Theory: The Economy in the Short-Run	<ul style="list-style-type: none"> • Aggregate Demand and Aggregate Supply (Chapters 9-10) • Aggregate Demand and Aggregate Supply: Open Economy (Chapters 11-12) • Aggregate Supply: Trade-Off between Inflation and Unemployment (Chapter 13) • Aggregate demand and Aggregate Supply: Dynamic Model (Chapter 14)
5. Macroeconomic Policy Debates	<ul style="list-style-type: none"> • Stabilization Policy (15) • Government Debt and Budget Deficits (Chapter 16).

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Be familiar with the frameworks for measurement and analysis of macroeconomic outcomes;
2. Specify and apply macroeconomic models and methods to analyse the determination of key economic measures such as output, unemployment, inflation and balance of payments
3. Apply macroeconomic models and methods to analyse and explain macroeconomic behaviour such as economic growth and business cycles;
4. Use macroeconomic models to analyse the effects of various economic policies on the economic environment;
5. Be informed about economic issues relating to government policy options and to analyse the potential effects of alternative policies;
6. Analyse and explain the effects of international economic policies and conditions, and their effects on domestic economy.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
Project 1	8 %
Test 1	17 %
Project 2	8 %
Test 2	17 %
Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1:** An individual based project evaluating the understanding of students in microeconomics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight per cent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic microeconomic concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in macroeconomics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight per cent (8%) of the total percentage points.

- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of macroeconomic concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of basic microeconomics and macroeconomics. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Textbook

1. Mankiw, Gregory N., 2010, Macroeconomics, 7th Edition, Worth Publishers.

Essential Reading:

1. Mankiw, N. G., 2001. Principles of Macroeconomics. 5th Edition. Worth Publishers. Available online at <http://bcs.worthpublishers.com/mankiw5/>
2. Dunbusch, R, Fischer, S and R, Startz, 2011. 11th Edition. McGraw-Hill & Irwin Publishers
3. Course materials will be made available by your lecturer in lectures and also via Google Classroom.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name:	Business Statistics
Subject Code:	AE222
Duration:	13 teaching weeks
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hours lectures + 1-hour tutorials + 1 hour project)
Delivery Mode:	On campus
Prerequisites:	First year AE pass all subjects
Subject Coordinator:	TBA

Synopsis

The study of this course enables the student to understand and apply quantitative data analysis and statistical inference and testing of business data. It is designed to help the student with the knowledge of statistical techniques in business and economic decision making.

Subject Topics

	Themes	Topic Details
1	Descriptive Statistics	<ul style="list-style-type: none"> • Organizing and Graphing Data • Numerical Descriptive Measures
2	Probability	<ul style="list-style-type: none"> • Probability Distribution & Applications • Discrete & Continuous Random Variables
3	Sampling Distribution	<ul style="list-style-type: none"> • Normal Distribution • Sampling Distributions of Mean and Proportions
4	Statistical Estimation	<ul style="list-style-type: none"> • Statistical Estimation of the Mean and Proportion (One & Two Population/s)

5	Statistical Testing	<ul style="list-style-type: none"> • Statistical Testing; One Population (Parametric Tests) • Statistical Testing; Two Populations (Parametric Tests) • Non-parametric Tests
6	Regression Analysis	<ul style="list-style-type: none"> • Simple Regression Analysis • Multiple Regression Analysis • Time Series Analysis & Forecasting

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Understand how to conduct surveys and collect data from primary and secondary sources for analysis.
2. compute measures of central tendencies and measures of dispersion of data.
3. conduct statistical estimation and testing of data.
4. apply and conduct parametric and non-parametric tests on data.
5. conduct correlation, regression analysis on panel data, cross sectional data and time series data.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	7.5%
2. Test 1	17.5%
3. Assignment 2	7.5%
4. Test 2	17.5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** An individual based assignment evaluating the knowledge and understanding of students in descriptive statistics, probability and sampling distribution to be completed in a period of two weeks will be given in week 4 and students to submit their completed project in week 6 of the semester. The assignment will comprise 7.5% of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in descriptive statistics, probability and sampling distribution. The test will be given in week 7 and will comprise 17.5% of the total percentage points.
- Assessment 3** **Assignment 2:** An individual based assignment evaluating the knowledge and understanding of students in statistical estimation, statistical testing and regression analysis to be completed in a period of two weeks will be given in week 10 and students to submit their completed project in week 11 of the semester. The assignment will comprise 7.5% of the total percentage points.
- Assessment 4** **Test 2:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in statistical estimation, statistical testing and regression analysis. The test will be given in week 12 and will comprise 17.5% of the total percentage points.
- Assessment 5** **Examination:** This will be an individual closed book exam. It is to be taken in class and the exam will be assessing the knowledge, understanding and application of business statistics. The exam will be given in week 15 and will make up 50% of the total percentage points.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Prem S. Mann, Introductory Statistics. 8th Edition, 2015, John Wiley & Sons

References

1. David P. Doane, Lori E. Seward, Applied Statistics in Business and Economics, 5th Edition, 2016, McGraw-Hill Publishing

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Banking and Finance
Subject Code:	AE223
Duration:	13 teaching weeks
Contact Hours:	6 x hours per
Credit Points:	20 (4 hours lectures + 1-hour tutorials+1hour Project)
Delivery Mode:	On campus
Prerequisites:	Pass all first year AE subjects
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

The study of this course enables the student to understand the core principles and applications in the economics of banking and finance. The **course** combines the study of modern economics with banking and finance. It introduces a broad range of economic subjects including banking, financial intermediation, asset and liability management, financial decision making, financial markets and institutions, and accounting. This wide range of topics will give the student an in-depth understanding of the way that organisations and financial systems work. The student will also learn to apply microeconomic and macroeconomic theory in financial contexts, for example the appraisal of competing investment opportunities – how to choose between investments which offer the same financial returns – and how government policy influences the stock and capital market.

Subject Topics

No.	Topics	Topic Details
1	Introduction	<ul style="list-style-type: none">• Why Study Money, Banking, and Financial Markets?• An Overview of the Financial System• What Is Money?
		<ul style="list-style-type: none">• Understanding Interest Rates• The Behaviour of Interest Rates

2	Financial Markets	<ul style="list-style-type: none"> • The Risk and Term Structure of Interest Rates • The Foreign Exchange Market • The Stock Market, the Theory of Rational Expectations, and the Efficient Market Hypothesis
3	Financial Institutions	<ul style="list-style-type: none"> • An Economic Analysis of Financial Structure • Banking and the Management of Financial Institutions • Banking Industry: Structure and Competition • Economic Analysis of Banking Regulation • Nonbank Finance • Financial Derivatives

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Discuss the roles of financial intermediaries, financial market participants and discuss various theories of financial intermediation
2. analyse the types, functions of a modern bank and explain payment systems, their importance and new trends.
3. Understand and explain the rationale, features including risks and history of international banking and the impact of the credit crisis on the international banking market
4. explain the role of central banks in theory and practice and the role of monetary policy
5. Understand and explain bank supervision and regulation.
6. Calculate bank balance sheets and the business of banking and calculate measures of bank performance and understand current issues in banking: bank failures and banking crises.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	7.5%
2. Test 1	17.5%
3. Assignment 2	7.5%
4. Test 2	17.5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** An individual based assignment evaluating the knowledge and understanding of students in descriptive statistics, probability and sampling distribution to be completed in a period of two weeks will be given in week 4 and students to submit their completed project in week 6 of the semester. The assignment will comprise 7.5% of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in descriptive statistics, probability and sampling distribution. The test will be given in week 7 and will comprise 17.5% of the total percentage points.
- Assessment 3** **Assignment 2:** An individual based assignment evaluating the knowledge and understanding of students in statistical estimation, statistical testing and regression analysis to be completed in a period of two weeks will be given in week 10 and students to submit their completed project in week 11 of the semester. The assignment will comprise 7.5% of the total percentage points.
- Assessment 4** **Test 2:** This is an individual closed book test to be taken in class and the test will assess the knowledge, understanding and applications of the students in statistical estimation, statistical testing and regression analysis. The test will be given in week 12 and will comprise 17.5% of the total percentage points.
- Assessment 5** **FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will be assessing the knowledge, understanding and application of business statistics. The exam will be given in week 15 and will make up 50% of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Mishkin, Frederic S., 2017, The economics of Money, Banking, and Financial Markets, 10th edition, The Addison-Wesley Series in economics.

References

1. Bailey, Roy E. (2015), The Economics of Financial Markets, Cambridge: Cambridge University Press.

Relevant Unitech Policies

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YEAR 3 SUBJECT SPECIFICATIONS

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Industrial Economics
Subject Code:	AE311
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20(4hrs Lect + 1hr Tut + 1hr Project)
Delivery Mode :	On campus
Prerequisites:	AE211 Microeconomics
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

This course studies traditional and modern theory of industrial organization. It analyses the idealized models of firms and markets by considering real-world frictions like limited information, transaction costs, and costs of adjusting prices, government actions, and barriers to entry by new firms into a market. It considers how firms are organized and how they compete in such a world.

Subject Topics

Topics	Topic Details
1: Introduction and Overview	Introduction and Theory <ul style="list-style-type: none">• Models• Organization The Firm <ul style="list-style-type: none">• Mergers and Acquisitions Costs• Cost Concepts• Economies of Scale• Empirical Studies of Cost Curves• Cost Concepts for Multiproduct Firms

2: Market Structures	Competition Monopolies, Monopsonies, and Dominant Firms Cartels: Oligopoly Joint Decision Making Non-cooperative Oligopoly Product Differentiation and Monopolistic Competition Industry Structure and Performance
3. Business Practices: Strategies and Conduct	Price Discrimination Advanced Topics in Pricing Strategic Behavior Vertical Integration and Vertical Restrictions
4: Information, Advertising, and Disclosure	Information Advertising and Disclosure
5: Dynamic Models and Market Clearing	Decision Making Over Time: Durability Patents and Technological Change How Markets Clear: Theory and Facts
6: Government Policies and Their Effects	Antitrust Laws and Policy Regulation and Deregulation International Trade (Optional)

Subject Learning Outcomes (SLOs)

On the completion of this subject, student will be able to:

1. Be familiar with the frameworks for measurement and analysis of microeconomic outcomes;
2. Specify and apply microeconomic models and methods to analyse the determination of microeconomic outcomes;
3. Apply microeconomic models and methods to analyse and explain behaviour of firms;
4. Use microeconomic models to analyse the effects of various government policies on the firms.

Assessment Tasks and Weightings (50% Continuous and 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	8%
2. Test 1	17%
3. Assignment 2	8%
4. Test 2	17%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1:** An individual based project evaluating the understanding of students in microeconomics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic microeconomic concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in macroeconomics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of macroeconomic concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of basic microeconomics and macroeconomics. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Carlton, D.W and J.M, Perloff (2015). Modern Industrial Organization. 4th Edition, Global Edition

References

1. Nicholson, W. (2004), Intermediate Microeconomics and Its Application, 9th edition, 2004, South-Western.
2. Perloff, J, M. (2011), *Microeconomics with Calculus*, 2nd edition, 2011, Pearson Education

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Development Economics
Subject Code:	AE 312
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4hrs Lect + 1hr Tut + 1hr Project)
Delivery Mode :	On campus
Prerequisites:	AE221 Macroeconomics
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

The world is faced with unequal economic development! The first part of this course introduces students to the concepts, theories, and methods used in the development economics. The second part helps focus students to the analysis of development theories, issues and policies of economic development. It looks at why different countries have progressed at varying rates and why other have regressed or stagnated. It compares the developed, developing and underdevelopment economies in terms of economic development and economic well-being.

Subject Topics

Topics	Topic Details
1. Principles and Concepts	<i>Introducing Economic Development</i> Economics and Development Studies; The Nature of Development Economics; Why Study Development Economics? The Important Role of Values in Development Economics; Economies as Social Systems: The Need to Go Beyond Simple Economics <i>What Do We Mean by Development?</i> Traditional Economic Measures; The New Economic View of Development; Amartya Sen's "Capability" Approach; Development and Happiness; Three Core Values of Development; The Three Objectives of Development; The Millennium Development Goals

<p>2. Comparative Economic Development</p>	<p><i>Defining the Developing World</i> <i>Basic Indicators of Development</i> Real Income, Health, and Education; Purchasing Power Parity; Indicators of Health and Education; Holistic Measures of Living Levels and Capabilities; The Traditional Human Development Index; The New Human Development Index <i>Characteristics of the Developing World:</i> Diversity within Commonality; Lower Levels of Living and Productivity; Lower Levels of Human Capital, Higher Levels of Inequality and Absolute Poverty; Higher Population Growth Rates, Greater Social Fractionalization, Larger Rural Populations but Rapid Rural-to-Urban Migration; Lower Levels of Industrialization and Manufactured Exports; Adverse Geography, Underdeveloped Markets; Lingering Colonial Impacts and Unequal International Relations How Low-Income Countries Today Differ from Developed Countries in Their Earlier Stages Physical and Human Resource Endowments; Relative Levels of Per Capita Income and GDP; Climatic Differences, Population Size, Distribution, and Growth; The Historical Role of International Migration; The Growth Stimulus of International Trade, Basic Scientific and Technological Research and Development Capabilities; Efficacy of Domestic Institutions</p>
<p>3. Classic Theories of Economic Growth and Development</p>	<p>Classic Theories of Economic Development: Four Approaches Development as Growth and the Linear-Stages Theories Rostow's Stages of Growth, The Harrod-Domar Growth Model, Obstacles and Constraints, Necessary versus Sufficient Conditions: Some Criticisms of the Stages Model Structural-Change Models The Lewis Theory of Development, Structural Change and Patterns of Development, Conclusions and Implications The International-Dependence Revolution The Neocolonial Dependence Model, The False-Paradigm Model, The Dualistic-Development Thesis, Conclusions and Implications The Neoclassical Counterrevolution: Market Fundamentalism Challenging the Statist Model: Free Markets, Public Choice, and Market-Friendly Approaches, Traditional Neoclassical Growth Theory, Conclusions and Implications</p>
<p>4. Problems and Policies</p>	<p>Poverty, Inequality, and Development Measuring Inequality and Poverty Measuring Inequality and Measuring Absolute Poverty Poverty, Inequality, and Social Welfare What's So Bad about Extreme Inequality? Dualistic Development and Shifting Lorenz Curves: Some Stylized Typologies, Kuznets's Inverted-U Hypothesis, Growth and Inequality Absolute Poverty: Extent and Magnitude Growth and Poverty Economic Characteristics of High-Poverty Groups Rural Poverty, Women and Poverty, Ethnic Minorities, Indigenous Populations, and Poverty Policy Options on Income Inequality and Poverty: Some Basic Considerations Areas of Intervention, Altering the Functional Distribution of Income through Relative, Factor Prices, Modifying the Size Distribution through Increasing Assets of the Poor</p>

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students can be able to:

1. Learn and explain the basic concepts and terms and understand the literature and analytical methods in the different areas of economic development;
2. Learn and explain the process of economic development, the experiences of underdeveloped and developing countries, and possible explanations for the process of development and problem of underdevelopment;
3. Compare and contrast the different economic development models;
4. Assess the relevance of research methods and the findings in the literature of economic development;
5. Understand and explain the impact of macroeconomic variables and policy implication on economic development;
6. Learn and explain the methods, data, and theories economists use to study international economic development.

Assessment Tasks and Weightings (50% Continuous & 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	8%
2. Test 1	17%
3. Assignment 2	8%
4. Test 2	17%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 **Project 1 / Assignment 1 / Quiz 1:** An individual based project evaluating the understanding of students in development economics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.

Assessment 2 **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic development economics concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.

Assessment 3 **Project 2/ Quiz 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in basic development economics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.

Assessment 4 **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of basic development concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.

Assessment 5 **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of basic development economics concepts and principles. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text /References /Readings

1. Todaro, M. and S, Smith (2014). Economic Development. 12th Edition, Pearson Education.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Labour Economics
Subject Code:	AE 313
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hrs lect+ 1hr tut + 1hr Project)
Delivery Mode :	On campus
Prerequisites:	AE211 Microeconomics.
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

The labour market is undoubtedly the most important market that impacts directly on almost all of us for a significant period of our lives. This course aims to introduce students to key theories, issues and problems in the analysis of labour markets. It uses microeconomic and macroeconomic theory to increase understanding of labour demand, labour supply and labour market outcomes. It addresses issues associated with changes in participation rates, the effect of minimum wage rates, the impact of unions, income inequality, labour market discrimination and unemployment (its causes and consequences).

Subject Topics

Topics	Topic Details
1. Introduction	Facts about employment, unemployment and labor market outcomes. Labor supply, labor demand and the labor market equilibrium in perfect competition. Introduction to the imperfection of the labor market and labor market institutions.
2. Minimum Wages	Empirical facts and measures, theory, empirical evidence and policy issues

3. Union and bargaining	Empirical facts and measures, theory, empirical evidence and policy issues.
4. Regulation of working hours	Empirical facts and measures, theory, empirical evidence and policy issues
5. Labor taxation	Empirical facts and measures, theory, empirical evidence and policy issues
6. Employment protection legislation	Empirical facts and measures, theory, empirical evidence and policy issues : income inequality, labor market discrimination and unemployment

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Have a general understanding of how labour markets operate,
2. Develop both knowledge and appreciation of applying general economic principles and theory in evaluating behaviour and interactions in the labour market,
3. Use quantitative data and develop qualitative analysis to explain how labour market outcomes change over time, and
4. Analyse current issues and policy debates in this area and be able to assess and critique labour market policies from a more knowledgeable perspective.

Assessment Tasks and Weightings (50% Continuous & 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	8%
2. Test 1	17%
3. Assignment 2	8%
4. Test 2	17%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1 / Assignment 1 / Quiz 1:** An individual based project evaluating the understanding of students in labor economics to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic labor economics concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2/ Quiz 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in labor economics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of labor economics concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of labor economics. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text/ References

1. Borjas, G. J. (2014). Labor Economics, 5th edition, McGraw Hill Irwin.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Monetary Economics
Subject Code:	AE321
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hrs lect+ 1hr tut + 1hr Project)
Delivery Mode :	On campus
Prerequisites:	AE221 Macroeconomics
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

This is a course in Economics module which gives an exposure to monetary theory and practice concerning the role of money in the economy and monetary transmission mechanism, theories of the demand for and supply of money, monetary policy in closed and open economies, Keynesian Frame work and the IS- LM Model. The Inflation theories and Rational Expectations, and international monetary system. Even though the focus is on macro theory and central banking, Foreign Exchange Markets, the evolution of national and international monetary systems, along with banking issues are discussed

Subject Topics

Topics	Topic Details
1. Introduction	<ul style="list-style-type: none"> • Monetary Economics • Functions of Money
2. Classical Quantity Theory of Money	<ul style="list-style-type: none"> • Classical Quantity theory of Money • Prediction of the Quantity Theory of Money. • Conclusions of quantity theory of money • Other Versions of the Quantity Theory • Criticism of the Quantity Theory of Money • Causality and Endogenous nature of money in commodity standards and fixed exchange rate systems
3. Keynesian Demand for Money	<ul style="list-style-type: none"> • Keynesian Demand for Money • Liquidity Trap • Keynes' Ineffectiveness of the monetary policy

4. Friedman's Modern Quantity Theory of Money	<ul style="list-style-type: none"> • Modern Theory of Money • The relevance of human capital • Capital theory frame-work
5. Money Supply	<ul style="list-style-type: none"> • Money Supply Process • Money Multiplier theory and the Bank deposit Multiplier.
6. Central Bank (BPNG)	<ul style="list-style-type: none"> • Role and Functions of the Central Bank of the Country – the Bank of Papua New Guinea.
7. Monetary Policy	<ul style="list-style-type: none"> • The Transmission Mechanism of the Monetary Policy • Interest Rate Channel, • Exchange Rate Channel, • Asset Prices Channel, • Credit Channel
8. Goods and Money Markets	<ul style="list-style-type: none"> • IS -LM Models • Aggregate Supply • Aggregate Demand • Inflation theories • Phillips Curve

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Review and explain the functions and role of money in the economy.
2. Discuss and explain the various quantity theory of money.
3. Analyse and explain the Keynesian demand for money, liquidity trap and the ineffectiveness of the monetary policy and the need for the Fiscal policy intervention.
4. Discuss and explain the money supply process and role of central banks and banking systems.
5. Explain the transmission mechanism of the monetary policy and the various channels of transmission
6. Use IS-LM and AD-AS models to explain the integration of the money and goods markets and analyze the effects of shocks on aggregate supply and aggregate demand.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted 2 averages must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	8%
2. Test 1	17%
3. Assignment 2	8%
4. Test 2	17%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1 Or Quiz:** An individual based project evaluating the understanding of students in Monetary Economics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic Monetary Economics concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in Monetary Economics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of Monetary Economics concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.

Assessment 5 FINAL EXAM: This examination is an individual closed book exam examining the basic understanding and application of and Monetary Economics The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Texts

1. Frederick, S Mishkin, F, S (2012). The Economics of Money, Banking and Financial Markets, 9th edition Addison –Wesley.

References:

1. Ladler, E. D. (1997). The Demand for Money - Theories and Evidence. 4th Edition. Addison Wesley Longman, Wesley Publication Pearson
2. Mankiw, N.G (2003). Macroeconomics. 4th Edition. Worth Publishers.
3. Hall, R and D.H, Papell. (2005). Macroeconomics. W.W Norton and Company.
4. Cecchetti, S.G (2008). Money , Banking , and Financial Markets.2nd Edition. McGraw Hill.
5. Available at <https://www.alt-m.org/2013/06/30/monetary-economics-a-reading-list/>

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>), PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Econometrics 1
Subject Code:	AE 322
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hours lect+ 1hr tut + 1hr project)
Delivery Mode :	On campus
Prerequisites:	AE222 Business Statistics
Co-requisites:	Nil
Subject Coordinator	: TBA

Synopsis

This subject deals with Econometrics which involves the application of Mathematics and Statistics in Economics. It deals with how economic theories and hypothesis can be empirically tested. Broadly the topics are regression analysis, time series models and cross sectional or panel data analysis.

Subject Topics

Topics	Topic Details
1. Basic Statistics	<ul style="list-style-type: none"> • Review: Random Variables, Sampling, Estimation, and Inference. • Expectation Rules
2 Probability Distribution,	<ul style="list-style-type: none"> • Probability Distribution, Expected Value, Population Variance, Independence of two random variables • Expected Value of random variable and of a function, Expected Value rules. • Population Variance, Independence of two random Variables, Continuous Random Variables

3. Covariance	<ul style="list-style-type: none"> • Covariance, Variance, and Correlation • Covariance -Variance rules and Correlation, unbiasedness and efficiency, estimators of variance, covariance, and correlation
4. Normal Distribution,	<ul style="list-style-type: none"> • Population means • Testing a Hypothesis relating to Population Mean, • “t” Test, • Confidence Intervals, • Consistency, • Central Limit Theorem
5. Simple Regression Analysis	<ul style="list-style-type: none"> • Understanding of regression analysis, regression coefficients and interpretation of them. • Deriving Regression coefficients, Interpretation of Regression Coefficients
6. Changes in the Units of Measurement, Goodness of Fit	<ul style="list-style-type: none"> • Units of measurement in regression • Goodness of Fit • Assumptions of Regression model
7. Types of Regression	<ul style="list-style-type: none"> • Types of Regression and Assumptions of the Regression model, • Unbiasedness of regression coefficient
8. Testing Hypotheses	<ul style="list-style-type: none"> • Testing Hypotheses related to Regression Coefficients, • Null Hypothesis and Alternative Hypothesis • Hypothesis, Confidence Intervals” test and “F” tests.

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Explain and demonstrate an understanding of basic Statistics and basic Econometrics;
2. Have a Clear understanding of the Population Mean, Expectation, Co Variance, and Variance rules;
3. Understand clearly concepts and application of testing Hypothesis, different methods of Testing Hypothesis such as Critical regions, Confidence intervals etc.;
4. Understand and calculate Correlation Coefficient, Variance, and standard deviation of the sample data;
5. Have a good grasp of the Concept and application of the Normal Distribution and Central Limit theorem.
6. Understand the basic concepts and application of Regression Analysis.

Assessment Tasks and Weightings (50% Continuous and 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	8%
2. Test 1	17%
3. Assignment 2	8%
4. Test 2	17%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1 / Assignment 1 / Quiz 1:** An individual based project evaluating the understanding of students in Basic Statistics and Econometrics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic Statistics and Econometrics concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2/ Quiz 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in Basic Statistics and Econometrics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.

Assessment 4 Test 2:

This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of Basic Statistics and Econometrics concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.

Assessment 5 FINAL EXAM: This examination is an individual closed book exam examining the basic understanding and application of basic Statistics and Econometrics. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14 week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Dougherty, C. (2016). Introduction to Econometrics. 5th Edition. Oxford University Press.
2. Gujarati, N. D. (2014). Basic Econometrics. 5th Edition.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>). PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics s (NQF Level 7)
Subject Name :	Environmental Economics
Subject Code:	AE 323
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hours lect+ 1hr tut + 1hr project)
Delivery Mode :	On campus
Prerequisites:	AE211 Microeconomics
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

This course is an introduction to environmental economics. It gives an economics perspective of environmental systems and their problems, with special attention to the use, misuse, and overuse of natural and environmental resources. The first part of the course will develop appropriate economic concepts, models, and tools for analyzing environmental and natural resource issues and problems. The second part of the course will apply the tools in a selection of environmental applications, including the efficient use of exhaustible and renewable resources and the control of pollution locally, nationally, and internationally. Throughout the course we consider the separate and complementary roles of markets and governments in allocating and regulating the use of environmental and natural resources.

Subject Topics

Topic	Topic Details
1. Introduction	What Is Environmental Economics? The Economy and the Environment
2. Analytical Tools	Benefits and Costs, Supply and Demand Markets, Externalities, and Public Goods The Economics of Environmental Quality
3. Environmental Analysis	Frameworks of Analysis Benefit–Cost Analysis: Benefits

	Benefit–Cost Analysis: Costs
4. Environmental Policy Analysis	Criteria for Evaluating Environmental Policies Decentralized Policies: Liability Laws, Property Rights, Voluntary Action Command-and-Control Strategies: The Case of Standards
5. Global Environmental Issues	The Global Environment International Environmental Agreements Globalization Economic Development and the Environment

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Develop a model for analysing environmental pollution control alternatives;
2. Derive and describe the efficiency attributes of alternative policies for controlling pollution;
3. Describe the concept of total economic value and the range of valuation tools available for estimating total economic value;
4. Demonstrate how economic models can be applied to real-world situations.

Assessment Tasks and Weightings (50% Continuous & 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Tasks	Weightings (%)
1. Assignment 1	8%
2. Test 1	17%
3. Assignment 2	8%
4. Test 2	17%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1 / Assignment 1 / Quiz 1:** An individual based project evaluating the understanding of students in basic environmental concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic environmental economics concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2/ Quiz 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in environmental concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of environmental concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of basic environmental economics concepts and principles. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14 week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Texts/ References

1. Field B, C. and M, K. Field (2017). Environmental Economics: An Introduction, Seventh Edition. The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY10020.

Readings

1. Stern, T. and J, Coria (2012). Policy Instruments for Environmental and Natural Resource Management Second Edition. RFF Press 711 Third Avenue, New York, NY 10017

Relevant Unitech Policies

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YEAR FOUR SUBJECT SPECIFICATIONS**SUBJECT SPECIFICATION**

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Advanced Microeconomics
Subject Code:	AE411
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hours lect+ 1hr tut + 1hr project)
Delivery Mode :	On campus
Prerequisites:	Pass all year 3 subjects
Co-requisites:	All year 4 level subjects
Subject Coordinator:	TBA

Synopsis

The goal of this course is to equip students with a basic understanding of the managerial decision-making processes in a business environment. It is designed to equip students with the tools of managerial decision making under circumstances of uncertainty and limited resources. The aim is to enable the student to use the tools of optimization to achieve efficiency and effectiveness in the organization. The objective is to enable students to become architects of business strategy rather than simply managers. It will enable students to develop critical thinking skills and provides them with a logical way of analysing business decisions. To understand the business environment better and the functions of organization and decision making, which they will find useful in subsequent employment, postgraduate study or research. Constrained Optimization is an important tool from mathematics to be applied in different areas in Microeconomics.

Subject Topics

Themes	Topics
1. Introduction to Microeconomics	Introduction and scope of microeconomics
2. Demand and Supply Analysis	Concepts such as elasticity of demand, its derivation and its applications.
3. Consumer Behaviour – Utility analysis – Indifference curves Analysis- Optimization Techniques.	Utility analysis of demand, Law of equi-marginal utility, Optimization of utility given the budget constraint applying Calculus with Lagrangian multipliers, Indifference Curves. Assumptions – Diminishing marginal rate of substitution. Budget Constraint, Optimization.
4. Production Analysis and Cost Curves	Production Analysis and Cost Curves. Production Functions, degree of homogeneity of production functions, Cobb- Douglas Production functions, different types of Isoquants, Elasticity of Substitution between factors, Optimization of Cobb Douglas Production function of inputs with cost constraints, Cost curves, Fixed cost, sunk cost, marginal cost, average cost, minimum average cost, cost functions, cubic cost functions. shape of the long run average cost. Profit, economic and accounting profit.
5. Market Structures: Perfect Competition, Monopoly, Monopolistic Competition, and Oligopoly models.	Perfect competition. Firms output decision of the equality of marginal revenue and marginal cost, Price and average revenue and marginal revenue equality in perfect competition (horizontal lines), short run supply curves, marginal cost above minimum average cost, Firm's output and profits in the long run. Monopoly: Monopolist falling demand curve, and Marginal revenue curve with more quantity, and the relation to the elasticity of demand. Monopoly profit and excess capacity Deadweight loss of monopoly. Monopolistic Competition In the short run and long run adjustments. Advantages and disadvantages of Monopolistic Competition. Oligopoly: 1 Sweezy Kinked Demand Model 2 Cournot model

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understand how the concept of economic risk can be employed in the managerial decision-making process.
2. Understand Utility, Marginal Utility, Consumer Optimization, Constrained Optimization using Calculus.
3. Grasp the concepts of elasticity and use in decision situation.
4. Identify ways to efficiently achieve virtually any of the organization's objectives.
5. Formulate pricing and production strategies. Understanding of Production Functions such as Cobb- Douglas, and elasticity of substitution and optimization of Inputs given the cost constraints using Calculus.

- Understand the economic environment and market structures such as Perfect competition, Monopoly, and Oligopoly in which the business firm operates.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1 OR Quiz	8 %
2. Test 1	17 %
3. Project /Assignment	8 %
4. Test 2	17 %
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1 Or Quiz:** An individual based project evaluating the understanding of students in Advanced Microeconomics concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic Advanced Microeconomics concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in Advanced Microeconomics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of Advanced Micro Economics concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of and Advanced Micro Economics The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Texts

Recommended Texts:

- Baye, M. R. (2012). *Managerial Economics and Business Strategy*. 7th Edition. McGraw-Hill/Urwin
- Salvatore, D. (2012). *Managerial Economics: Principles and World-wide Applications*. 7th Edition Oxford Higher Education.
- Salvatore, D. (2009). *Principles of Microeconomics*. Oxford University Press. 5th Edition.
- Griffiths, A and S, Wall (2000). *Intermediate Microeconomics: Theory and Applications*. Pearson Education Limited.
- Friedman, M (2007). *Price Theory*. Routledge.
- Jacques, I. (1999). *Mathematics for Economics and Business*. Addison -Wesley
- Perloff, M. J., and J, A, Brander. (2016). *Managerial Economics and Strategy*. 2nd Edition, Pearson Series in Economics

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name:	Econometrics II
Subject Code:	AE412
Duration:	13 teaching weeks
Contact Hours:	6 x hours per week
Credit Points:	20: (4 hours lect+ 1hr tut + 1hr project)
Delivery Mode:	On campus
Prerequisites:	AE322 Econometrics I
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

This course Econometrics 2 builds on the course Econometrics 1 (AE322). Econometrics involves the application of Mathematics and Statistics in empirically testing the economic theory and models. It deals with how economic theories and hypothesis can be empirically tested. Broadly the topics are simple regression analysis using time series, cross sectional and or panel data, the assumptions of ordinary least squares (OLS), the derivation and estimation of the OLS parameters, the Gauss-Markov theorem, Precision of estimators, Goodness of fit, Hypothesis Testing and its Theoretical Foundations; Multiple Regression; Violation of OLS Assumptions and their implications, Dummy Variables, Introduction to Limited Dependent Variable models and maximum likelihood estimates; Hands-on-exercises in computers.

Subject Topics

Topics	Topic Details
1: Introduction to Simple Regression	Statistical background to econometrics and the two variable regression model. The Required Quality of Regression Model. The Classical Linear Regression Model
2: Assumptions of CLRM	The Assumptions of the Classical Linear Regression Model
3: Simple Regression: Estimation	Simple Regression Analysis, Deriving Regression coefficients, Interpretation of Regression Coefficients
4: Evaluation of Estimations	Precision of Measurement, Goodness of Fit

5: Interval Estimation and Hypothesis Testing	Testing Hypotheses Related to Regression coefficients – Null & Alternative Hypothesis, Confidence Intervals, “t” test and “F” test
6: Functional Forms and their Applications	Functional Forms of Regression Model, Unbiasedness of regression coefficient
7: Multi variate Regression	Multiple Regression with two explanatory variables

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Specify simple and multiple regression equations
2. Estimate the parameters and constants and evaluate the statistical significance of the parameters
3. Interpret the estimated results and assess the goodness of a fit of regression equations
4. Understand the use of dummy variables as explanatory variables and the use of limited dependent variable models
5. Apply the econometric models in testing economic theories.

Assessment Tasks and Weightings (50% Continuous and 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Test 1	15
2. Project /Assignment	20
3. Test 2	15
4. Final Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic econometric concepts and principles. The test will be given in the week the subject lecturer announces and will comprise 15 % of the total percentage points. The test will cover early to middle topics.
- Assessment 2** **Assignment:** The second assessments task will also be an individual based assignment. It will be used for evaluating the understanding of students in econometric concepts and principles learned in first topics to the middle topics. The assignment is to be completed in a period of two-four weeks. The exact dates of issuing and submitting will be decided by the subject lecturer. The assignment will compose another 20 percent (20 %) of the total percentage points.
- Assessment 3** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of econometric concepts and principles taught in mid to last topics. The test will be given towards the end of semester and will make up another 15% of the total percentage points.
- Assessment 4** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of basic econometrics concepts and principles taught throughout the course. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Gujarati, D. N.; and C. Dawn (2009). Basic Econometrics. 5th Edition. McGraw-Hill/Irwin Companies Inc. New York.

Additional References

1. Dougherty, C. (2016). Introduction to Econometrics. 5th Edition. Oxford University Press

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name	Public Finance
Subject Code:	AE413
Duration:	13 teaching weeks
Contact Hours :	6 hours per week (4 hours lect+ 1hr tut + 1hr project)
Credit Points:	20
Delivery Mode :	On campus
Prerequisites:	All third-year economics subjects.
Co-requisites:	All fourth-year economics subjects
Subject Coordinator:	TBA

Synopsis

This course deals with the government involvement in finance: Public expenditure, taxes, and public debt. It discusses the nature of the Public Goods, Externalities, Public Choice theory and the allocation of projects under democratic process, Wagner's law of increasing government expenditure and the incidence of taxes, and the efficiency of taxes. It aims to achieve to introduce the students to the finances of the government, the nature of the public goods and how the public goods allocation efficiency criteria are different from that of the private goods, the nature of externalities and how the negative externality is affecting the output decisions. The students are introduced to the public choice theory and the pros and cons of the democratic process of voting to decide resource allocation, and the increasing role of the government expenditure. The Students are introduced to the government taxation, different types of taxation, the incidence of taxation and the efficiency of the taxation.

Subject Topics

Themes	Topics
1. Public Finance	Significance of Public finance Concepts of Taxation, Government Expenditure and Public Debt
2. Public Goods	Public Goods - definition- features - Efficient Provision of Public Goods and Private Goods – Pareto Optimality conditions
3. Externality	Externality - Nature of Externality – Optimum output under externality with social costs and marginal damage – Coarse Bargaining Theorem - Solutions offered for Negative Externality
4. Public Choice Theory	Public Choice Theory: Democratic Voting Process and stable outcome for allocation of projects – Unstable situations and outcomes of Cycling of votes - Single Peak and Multi Peaks in choice – Median Voter Theorem –Log Rolling and Trading of Votes and stable and unstable outcomes – Arrow's Impossibility Theorem.
5. Taxation	Introduction to different Taxes, Incidence of Taxes, Unit Taxes and Ad Valorem incidence, Taxes on Profits, Capitalization of Taxes for Fixed Supply factors such as Land

6. Public/Government Expenditure	Government Expenditure Wagner's Law of Increasing Government Expenditure
7. Public/Government Debt	Government Debt Different types of Government debts and financing and implications

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Define and explain the terms and concepts applied in public finance and appreciate the importance of the Public Finance,
2. Compare the nature of public and private goods and discuss the issues in the efficient provision of public goods;
3. Understand and explain the nature of externalities and discuss examples of policy measures used to reduce negative externalities or increase positive externalities;
4. Discuss the Public Choice theory and its role in understanding the democratic voting process to determine the allocation of resources;
5. Analyse the various types of taxes or tax systems and explain the incidence and efficiency of various taxes;
6. Analyse the various areas of public expenditure and explain its the role in maintaining the functions of government;
7. Analyse and discuss the various sources and significance of public debt and discuss different ways of public debt financing.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1 or Quiz	8 %
2. Test 1	17 %
3. Project /Assignment	8 %
4. Test 2	17 %
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1 Or Quiz:** An individual based project evaluating the understanding of students in Public Finance concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic Public Finance concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in Public Finance concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of Public Finance concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of and Public Finance The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Texts

1. Rosen, H. S and T, Gayer (2014). Public Finance. (Global Edition) 10th Edition. Global Edition. McGraw Hill.
2. Musgrave, R. A and P. B, Musgrave (2004). Public Finance in Theory and Practice. Fifth Edition. McGraw Hill Education.
3. Hyman D, N. (2014). Public Finance A Contemporary Application of Theory to Policy. Cengage Learning.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>). PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Research Methodology
Subject Code:	AE 414
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hours lect+ 1hr tut + 1hr project)
Delivery Mode :	On campus
Prerequisites:	Must have passed all subjects and the requirements for BCAE3
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

This subject provides students with understanding of economic research methodology. It provides students with the understanding of differences between three (3) related but conceptually distinct areas; (a) The Economic Theory (b) The Economic Model (c) The Complex Economy around us, how the Assumptions provide the links between the three. It also provides students with understanding of the definition 'Hypothesis', distinguishing between the good and the bad ones. It further provides students with the methods of economic or business research, which include among the main ones the following areas; Designing a good research proposal; Carrying out a Literature Review; Designing a good survey questionnaire; Different types of questionnaire, (such as opened-ended, closed-ended questionnaire, random sampling, stratified sampling, quota sampling etc. depending on research approach), The Sampling techniques that technically account for the error term; Distinguishing between inferential statistics and basic statistics; The theory and practice of setting-up the research Hypothesis; The methods of testing the Research Hypothesis; Selecting the best referencing techniques from among existing ones; Writing the final Bibliography; The Scientific Report or Thesis writing format; Preparing to defend a student's research project in the final project presentation or a in Formal Thesis, where there is an examination board set up to examine the student for the research.

Subject Topics

Table 1 The Topics and the Details	
Themes	Topic Details
1. Designing a good research proposal	<p>Defining the term 'Research Proposal'</p> <ul style="list-style-type: none"> • Linkage between the Economic theory, Economic model and the real complex economic or business world • Show what literature survey has shown to be a deficit in knowledge • Show how the research will fulfil the gap in knowledge based on your literature survey • The proposal shows how the students does so in the research in terms of a controlling <i>thesis or idea</i> you'd like to prove to disprove in the research through this research • In the proposal show your hypothesis (which is defined as an unproved statement) yet to be proved by the research • Show the limitations of the research (what you can or cannot do) • Show limitation of time • Show limitation of resources • Show how the research will be conducted in light of the named constraints.

2. Carrying out a literature review	<ul style="list-style-type: none"> • Commencing with the stated thesis or idea to be researched a reference boom or publication obtain definitions and limitation of the thesis or idea • From the reference book go to the library of carry out readings of work by books or journals and a carry out readings • Write a list of books or journals, authors etc. that are found from earlier reference and other literature • Carry out a reading schedule • After having read the listed material, write a report and summarize the findings of the literature survey • This summary report will form the basis of your research. But you will add or remove relevance of other books, journals or authors as the students proceeds in the research, because other references will crop up as the student proceeds.
3. Designing a good questionnaire	<ul style="list-style-type: none"> • Research can be primary (survey), secondary (research done or books written by others) or tertiary (publications based on others work, or books). For example. If research is primary (survey-based), design a good questionnaire. A questionnaire is good if it is directly related to the thesis (or topic) on hand and linked to the deficit in knowledge shown by literature survey (See previous topic). Depending on the type of primary research different types of questionnaires may be designed. • Different types of questionnaires, (such as opened-ended, closed-ended questionnaire, random sampling, stratified sampling, quota sampling etc. depending on research approach) • Provide examples or illustrations
4. Selection of the Sample size for interviews to be carried out	<ul style="list-style-type: none"> • There exist methods that may enable the students to select the technically sample size that account for the error term • Definition and discussion of the methods involved • Discussions of the Level of Significance and Confidence • Provide examples or Illustrations
5. Hypothesis Testing	<ul style="list-style-type: none"> • The Null Hypothesis • The Alternative Hypothesis • The Procedures in Testing Hypothesis • Provide examples or Illustrations
6. System of Referencing	<ul style="list-style-type: none"> • The different referencing systems around the world • In-text and other referencing • The APA system used in the University of technology, Lae • How to adopt and use the APA referencing system • Provide examples or Illustrations
7. System of Bibliography	<ul style="list-style-type: none"> • The different referencing systems around the world • The APA system used in the University of technology, Lae • How to adopt and use the APA referencing system • Provide examples and Illustrations
8. Format for Writing of the Final Students Report	<ul style="list-style-type: none"> • Identify the Scientific Report-writing format of the University of Technology, Lae • Discussion of the Unitech format • Provide examples or Illustrations of the Unitech format
9. Preparation for a Student Presentation of project result or defence for a formal Thesis	<ul style="list-style-type: none"> • Show that the research was to fill the <i>gap in knowledge</i> revealed by the earlier literature survey (See section of the literature survey) • Show what the Research proposal had wanted to do • Show the Project idea or Thesis • Show whether the 'Hypothesis' was proved (or Disproved), and state why • Clearly summary main results of the research and conclude

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students can be able to;

1. Understanding the relationship between economic model, economic theory, complex economy and how they are linked by the assumptions.
2. Understanding an economic model, including different stages of the construction of an economic model.
3. Define what a hypothesis is distinguishing between a good and a bad hypothesis.
4. Discuss and explain a research methodology for an economic or business problem on hand.
5. Discuss how to use inferential statistics, with reference to Hypothesis-Testing of an economic or a business problem.
6. Discuss ways/methods of Data Collection: Theory and Design of a survey questionnaire.
7. Discuss the selection of a technically-appropriate sample-size.
8. Preparing a research proposal.
9. Carrying out a literature survey review of the topic or thesis.
10. Discuss the system of referencing and systems of bibliography.
11. Discuss how to prepare for a defence of the research project or a thesis.

Assessment Tasks and Weightings (50% Continuous And 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1 or Quiz	10%
2. Test 1	10%
3. Project /Assignment	10%
4. Test 2	20%
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1 Test 1:** This is an individual short test to be taken in class. The test will assess the understanding and of the topics on which lectures were given, after the first three (3) weeks of lectures. The test 1 comprises 10% of the total percentage points.
- Assessment 2 Test 2:** This is also an individual short test to be taken in class. The test will assess the understanding of the topics on which the lectures were given, after the first six (6) weeks of lectures. The test 2 comprise 10% of the total percentage points.
- Assessment 3 One individual Case-concept from textbook or from lectures:** One individual case-concept chosen from the textbook or from the lectures and write and submit a short report on students understanding of the chosen concept or topic. It is worth 10%.
- Assessment 4 One major individual written Assignment:** The one major written assignment is used for evaluating the understanding of students' important topics in the course. The major assignment is scheduled to be completed and submitted two weeks after the mid-semester break. It implies the students will use the break period to carry out research and readings during the break. The assignment comprises 20% of the total percentage points.
- Assessment 5 FINAL EXAM:** This is an individual Final Examination. It examines the basic understanding and application of research methods learnt in this course. The Final Examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Gujarati Damodar N, *Basic Econometrics*, McGraw-Hill, New York, 5th edition. 2017

Other Useful References

1. Gipe G J, *How to Prepare a Thesis* (Basic Steps and Hints about writing a thesis for PNG students), PNG University of Technology, Student subject Manual, August 2007.
2. Gipe G J, *students subject Manual, Demand theory and Estimation*, Student subject Manual PNG University of Technology, August 2008.
3. Gipe G J, *Basic Statistical Models Defined*, PNG University of Technology, Student subject Manual, September 2009.
4. Gipe G J, '*Reviews and Reflections of Long-term Development in PNG, with Special References for Morobe and Salamaua*', February 2015, A Conference Paper prepared for UPNG-ANU Conference on PNG Update 2015.
5. Department of Mathematics and statistics, *Business Statistics*, Department of Mathematics and Computer Science, University of Technology Bookshop, July 2000.
6. Shadlow John, *Basic Statistical Inference*, Department of mathematics and Computer Science, University of Technology Bookshop, March 2011
7. Shadlow John, *MA 367 Sampling and Survey*, *Lecture Notes*, University of Technology Bookshop, March 2005.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Macroeconomic Theory and Policy
Subject Code:	AE421
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20: (4 hrs lect+ 1hr tut + 1hr project)
Delivery Mode :	On campus
Prerequisites:	AE212
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

This course is an intermediate level macroeconomics course designed to reinforce and equip undergraduate students with continuation of macroeconomics knowledge and skills. It reinforces some of the notable macroeconomic theories and analyses how these theories and related models have been applied in terms of macroeconomic policies. It will help students to understand the trends and fluctuations of macroeconomic aggregates like national output, unemployment, inflation and interest rates; and predict the outcome of alternative government policies related to current economic problems of Papua New Guinea and the rest of the world. It will equip students with a knowledge base incorporating the central issues and models of macroeconomics and aids in the development of analytical skills required for the application of the theory to real-world problems in Papua New Guinea and the world.

Subject Topics

Topics	Topic Details
1. Introduction and Overview	Macroeconomic theory, role of macroeconomic theory, examples of major macroeconomic theories, macroeconomic policy, goals of macroeconomic policies
2. The (Real) Business Cycle Theory: Short-Run Economics Analysis	Classical theory of income; Output employment fluctuations, Aggregate Demand, Aggregate Supply; Unemployment, Consumption; Government Debt; Money and Inflation
3. Long Run Economic Analysis: Economic Growth: Exogenous Growth Models	Exogenous Growth Model Solow-Swan Growth Model
4. Long Run Economic Analysis: Economic Growth: Endogenous Growth Models	Endogenous Growth Model -Romer's Model of Learning by Doing -Lucas' Model of Education

5. Basic Overlapping Generation Model	Basic Overlapping Generation Model OLG model of small open economy Real business cycle: Concepts and Evidence Real business cycle in Overlapping Generation Model
6. Monetary Economics Concepts	Monetary policy: concepts and issues Financial markets and the macroeconomy, Money and Inflation
7. Public finance: concepts and issues	Public finance, importance of public finance, public revenue, public expenditure, public debt, methods of payments of public debts
8. Nominal Rigidities and Economic Fluctuations	Nominal rigidities (price-stickiness or wage-stickiness), aggregate price level, general theory of employment, interest and money; classical dichotomy Causes of nominal rigidities, Economic fluctuations
9. Social Security and Capital Accumulation	Social security, savings, economic growth, capital accumulation/formation
10. Small Open Economy	Balance of payments accounts, exchange rates, foreign direct investments, international capital flows.

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Be familiar with the frameworks for measurement and analysis of macroeconomic outcomes;
1. Specify and apply macroeconomic models and methods to analyse the determination of macroeconomic key outcomes such as output, unemployment, inflation and balance of payments;
2. Apply macroeconomic models and methods to analyse and explain macroeconomic behaviour such as economic growth and business/economic cycles;
3. Use, analyse and compare empirical data against modern macroeconomic theories and models.
4. Analyse and explain the effects of international economics policies and macroeconomic fluctuations or conditions and their effects on the domestic economy.

Assessment Tasks and Weightings (50% Continuous and 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1 or Quiz	10%
2. Test 1	10%
3. Project /Assignment	10%
4. Test 2	20%
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Major Project + Attendance and Participation

This is an individual based project evaluating the understanding of students in macroeconomics concepts and principles. It will be two parts—first part is an individual 12 minutes class presentation on a chosen macroeconomics topic. The presentations start in week 4 and ends in week 10. Part two will be a write-up of their presentation to be completed and submitted in week 11. The major assignment will comprise 14 percent (14 %) of the total percentage points. Attendance and active participation of will be assessed and it will be 14% of total percentage assessment points.

Assessment 2 Test 1: This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic microeconomic concepts and principles. The test will be given in week 6 and will comprise 12 % of the total percentage points.

Assessment 3 Project 2: The second project will also be an individual based project. It will be used for evaluating the understanding of students in macroeconomics concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another 8 percent (8%) of the total percentage points.

Assessment 4 **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of macroeconomic concepts and principles. The test will be given in week 10 and will make up another 12 % of the total percentage points.

Assessment 5 **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of basic microeconomics and macroeconomics. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Froyen, R. T. (2013c). *Macroeconomics: Theories and Policies*. 10th Edition. Global Edition. Pearson Education Press

References

1. Mankiw, G. N., (2010) *Macroeconomics*. 7th Edition, Worth Publishers.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>). PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Managerial Economics
Subject Code:	AE 422
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20: (4 hrs lect+ 1hr tut + 1hr project)
Delivery Mode :	On campus
Prerequisites:	Must have passed all subjects and requirements for BCAE3
Subject Coordinator:	TBA

Synopsis

The course provides students with better understanding of *managerial economic theory, the application of the theory and the analytical tools*, that students may use in competitive market places for corporate proficiency, profitability, and sustainability. The subject provides students with theory of managerial economics, the five (5) stages of modern decision-making, it provides for the theory of the firm, (why do firms exist, objectives of firms), the cost theory, the supply and demand theory, the price elasticity of demand, capital-budgeting, and the theory and practice of econometrics-regression analysis. The subject also provides for macroeconomic analysis of international trade and exchange rate.

Subject Topics

Themes	Topic Details
1. Introduction: What do Economists study in macro- and microeconomics?	<ul style="list-style-type: none">● Essential elements of modern microeconomics● Essential elements of macroeconomics
2. Understanding managerial economics; Five stages of Modern Decision-making	<ul style="list-style-type: none">● Definition of “Managerial Economics”● The Five stages of Modern Decision-Making Process

3. The Theory of Supply and Demand, Concept of Price Elasticity of Demand and Decision-Making; Cost Structures; Short run and long-run production curves	<ul style="list-style-type: none"> ● Definition and Determinants of Supply ● Long-run Supply; short-run Supply ● Definition and the Determinants of Demand ● Individual and market Demand ● The Elasticity and Total Revenue; Case Price Elasticity of Demand ● Cost Structures and Decision-making ● Short run Production curve; Long-run production curve
4. Practical Cost-Benefit Analysis	<ul style="list-style-type: none"> ● The Essential Elements of Cost-Benefit Analysis ● Practical Approach to Cost-Benefit Analysis for Managers ● Shadow Pricing Methodology ● Effects of Income Distribution of a large project ● The UNIDO Approach to Cost-Benefit Approach ● The Little-Mirrlees Approach to Cost-Benefit Analysis
5. Capital-Budgeting Techniques and decision-making	<ul style="list-style-type: none"> ● Introduction the Theory and the Practice of Capital Budgeting ● Internal Rate of Return (IRR) ● Net Present Value (NPV) ● Cost-Benefit Ratio (CBR) ● Sensitivity Analysis (SA) ● Switching Value Analysis (SVA) ● Cash-Flow Analysis (CFA) ● Risk-Return Analysis (RRA) ● Pay-Back period (PBP) ● Discounted Pay-Back Period (DPBP)
6. Econometrics-Regression Analysis and Decisions-Making	<ul style="list-style-type: none"> ● The Essential Concepts of Econometrics-Regression Analysis ● Estimated Regression Line, the X and the Y Variables ● Making Forecasts or Projections ● Coefficient of Determination (r^2) ● Coefficient of Relationship (r) ● The Hypothesis Testing using Regression Analysis

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. At the end of this course, students can be able to; understand and define the basic concepts and the analytical methods of Managerial Economics;
2. outline and explain the process and various stages of decision making in Managerial Economics and the roles of Modern Manager;
3. utilize the price theory (demand and supply) and the concepts of elasticities to explain how decision decision-making is done in managerial economics.
4. Use the theory of firm and cost structures (short run, long-run production curves) to analyse decision-making;
5. Discuss and explain the concepts and applications of cost-benefit analysis and decision-making.
6. Understand and explain Capital-Budgeting Techniques and Decision-making'
7. Understand and explain Econometrics Analysis and Decision-making

Assessment Tasks and Weightings (50% Continuous And 50% Examination)

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Test 1	10%
2. Test 2	10%
3. Case Study	10%
4. Assignment	20%
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Test 1:** This is an individual short test to be taken in class. The test will assess the understanding and applications of the topics after the first three (3) weeks of lectures. The test 1 comprises 10% of the total percentage points.
- Assessment 2** **Test 2:** This is also an individual short test to be taken in class. The test will assess the understanding and applications of the topics after the first six (6) weeks of lectures. The test 2 comprises 10% of the total percentage points.
- Assessment 3** **One weekly individual Case study from Textbook:** Each week individual student is scheduled to carry out research and/or readings from the textbook or from internet on specific topics and write and submit a short report worth 10% on their understanding of the respective chosen topic, may be based on the lectures.
- Assessment 4** **One major individual written Assignment:** The one major written assignment is used for evaluating the understanding of students' important topics in the course. The major assignment is scheduled to be completed and submitted two weeks after the mid-semester break. It implies the students will use the break period to carry out research and readings during the break. The assignment comprises 20% of the total percentage points.
- Assessment 5** **FINAL EXAM:** This is an individual Final Examination. It examines the basic understanding and application of basic Development economics. The Final Examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Salvatore D, Managerial Economics in a Global Economy, New York Oxford, Oxford University Press, 2007, 6th Edition.

Other References

1. Wilkerson Nick, Managerial Economics, Cambridge University Press, New York, 2005

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name	International Trade and Finance
Subject Code:	AE423
Duration:	13 teaching weeks
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hrs lect+ 1hr tut + 1hr project)
Delivery Mode:	On campus
Prerequisites:	Pass all 3 rd year AE subjects.
Co-requisites:	
Subject Coordinator:	TBA

Synopsis

This subject deals with international economics which contains international trade theories, international trade patterns, and international finance dealing with balance of payment, exchange rates theories and policies, and international policy coordination. International finance of the exchange rates and foreign exchange markets.

Subject Topics

Themes	Topic Details
1. Introduction to International Economics	<ul style="list-style-type: none">International Economics, International Trade, International Finance, Significance of international trade and finance
2 World Trade an Overview	<ul style="list-style-type: none">Gravity Model and influence of the size of the economy on trade of major countries
3 International Trade Theory	<ul style="list-style-type: none">The Ricardian Comparative Advantage Theory of Trade; One factor – labour productivity – model; Specific Factors Model, Factor movements; Resources and Trade: The Heckscher-Ohlin Model(H-O)Specific Factors and the importance of income distributions effects of trade; Factor Price Equalization, Trade and Income Distribution, Empirical Evidence; Economies of Scale and Imperfect competition in International Trade
7. Trade Policies in Developing Countries	<ul style="list-style-type: none">Trade policies pursued in developing countries. Trade and Protection:Tariffs and Quotas; Anti-Dumping and Countervailing Duties; Export Subsidies, Strategic Trade Policy, WTO and the Multilateral Trading System: Theory and Policy; Regional Trade Agreements; Trade and International Environmental Agreements
5 National Income Accounting and Balance of Payments.	<ul style="list-style-type: none">national income account's identity, balance of payments, BoP surplus and deficits in BoP
6 Foreign Exchange Markets and Exchange rates	<ul style="list-style-type: none">Exchange rate determination – both theory and practiceExchange Rate regimes
7 International Monetary Systems	<ul style="list-style-type: none">International Financial Institutions, International financial/monetary systems

Subject Learning Outcomes

Upon completion of this subject, students will be able to:

- Understand the major models of International Trade, both traditional and modern, and to distinguish their assumptions.
- Understand the Principle of Comparative Advantage and its formal expression and interpretation with in different models.
- Understand the linkages between trade and income distribution and economic development.
- be able to apply both partial equilibrium and general equilibrium analysis to study the implications of trade policy such as tariffs, quotas, and subsidies.
- be familiar with, and be able to critically analyse the arguments for free trade, and the protection, considering cost and benefits on different sections of society.

6. Understand Open Economy Macroeconomics and discuss different exchange rate systems and how the foreign exchange markets work, and understand how exchange rates are determined under different exchange rate regimes.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1 OR Quiz	8 %
2. Test 1	17 %
3. Project /Assignment	8 %
4. Test 2	17 %
5. Examination	50 %
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1 Or Quiz:** An individual based project evaluating the understanding of students in International Trade and Finance concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise eight percent (8%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic International Trade and Finance concepts and principles. The test will be given in week 6 and will comprise 17 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in International Trade and Finance concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of International Trade and Finance concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of and International Trade and Finance. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Texts

Feenstra, R, C and A, M. Taylor. (2011). International Trade. 2nd edition. Worth Publishers

Other References:

1. Krugman, P. R and M, Obstfeld (2014). International Economics Theory and Policy. 10th Edition. Addison Wesley Longman, Pearson Education Publishers.
2. Salvatore, D. (2004). International Economics. Wiley International Edition.
3. Sodersten, B and G, Reed. (1994). International Economics. The Macmillan Press.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Applied Economics (NQF Level 7)
Subject Name :	Research Project in Economics
Subject Code:	AE 424
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	20 (4 hrs lect+ 1hr tut + 1hr project)
Delivery Mode :	On campus
Prerequisites:	Must have passed all courses and requirements for BCAE 3
Co-requisites:	Nil
Subject Coordinator:	TBA

Synopsis

The subject introduces the final year applied economic students to carry out independent research in economic or business and data analysis with no or little supervision. There are two sections. In the first, the subject teaches the methods or the tool of economic models and in their context, it introduces relevant topics about academic research, including how to carry out surveys and interviews. In the second, part with the support of the supervisor/lecturer, each student identifies and carries out hands-on empirical research on an economic or a business problem in the local economy. In the end individual student is required to present a summary of their findings in class, and the final written work is submitted for marking. There is no final examination for the subject.

Subject Topics

Topic	Examples or Illustrations of proposed topics/areas that may be chosen by a student
(1) The chosen topic should be related to a an economic or business problem in PNG (or overseas, via the internet)	<ul style="list-style-type: none"> • The relationship between the total money supply and Inflation in PNG for a relative a short and specific period • The relationship between the total of the rising crime and PNG's total public expenditure for a short and specific period • The relationship between the real growth in PNG's GDP and the Aggregate levels of unemployment for a short specific period • The problems of queuing at a local commercial bank, Lae • The supply and demand for kaukau (or other food item) by a local vender, in the main market Lae • The Profitability of a Public Motor Vehicle (PMV) in Lae etc. • The Cost-Benefit Analysis of a Banana Boat project of Salamaua area, Morobe province.
(2) The chosen topic should have readily available very detailed statistical data or numbers which would be analysed using appropriate methodology learnt in the past semesters (Examples. An appropriate application of econometric-regression, the Stata or other tools of statistical analysis	<p>Examples or Illustrations of topics/areas that may be <u>rejected</u> by the supervisors/lecturer, because the topics do not imply statistical data are involved, unless converted to statistical data for detailed analysis;</p> <ul style="list-style-type: none"> • The narratives of a Tribal fight between Clan A and Clan B • The narratives of Relationship between person A and B • The conversation between the general staff and the General manager of Food Mart, Lae
(3) The topic should be limited and be restricted in scope, so as to make possible in-depth treatment of a chosen area or topic within a relatively short time period (in this case, one semester).	<p>Examples or Illustrations of topics/areas that may be <u>rejected</u> by the supervisors/lecturer because the topics are too long in scope;</p> <ul style="list-style-type: none"> • The relationship between the total level of the rising crime and PNG's total public expenditure, 1975-2021 • The relationship between the real growth in PNG's GDP and the Aggregate levels of Unemployment, 1975-2021 • The problems of Bank Queuing at a local Commercial bank, Lae, 1975-2021. • The relationship between the GPA and the hours spent in study by all the students in all 13 academic Schools, in the University of Technology, 1975-2021.

(4) The chosen topic should be of direct interest to the student and the topic would add value to personal development of the students in future.	<p>Examples or Illustrations of topics/areas that may be <u>rejected</u> by the supervisors/lecturer because the topics may not be of direct future interest of the final years Applied economic students;</p> <ul style="list-style-type: none"> • A study of all the University students in all the 13 Academic Schools, who were infected by bouts of malaria in the University of Technology • Attitudes of Boy-Girl relationships of the Final years Applied economic students, in the University of Technology
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Subject Learning Outcomes (Slos)

Upon the completion of this subject, students will be able to:

1. Acquire and utilize relevant information within a specific area of investigation related to economics or business
2. Analyse and evaluate real surveyed data and information from the real world
3. Design and carry a program of independent research with minimum supervision
4. Draw relevant conclusions and communicate their findings effectively.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. An interview with Supervisor Re: Suitability of Proposed topic/area as per the four (4) criteria	5%
2. One major assignment Re: a write-up of a Research proposal	20%
3. Methodology shown in Data/Statistical collection in Research Proposal	5%
4. The Final Students' Seminar/Presentation, In-Class of Summary of the Research Results	20%
5. Assessment by Supervisor of Content of the Final Written Students' Research Work	50%
TOTAL	100%

* There is no Final Examination for the subject, AE 466 Research Project in Economics.

Students must also refer to the Subject Assessment Details.

Assessment 1	Interview with Supervisor: An interview with Supervisor Re: Suitability of Proposed topic/area as per the four (4) criteria worth 5%.
Assessment 2	Assignment 1: One major assignment Re: a write-up of a Research proposal worth 20%.
Assessment 3	Assignment 2: Methodology shown in Data/Statistical collection in Research Proposal worth 5%.
Assessment 4	Seminar/Presentation: The Final Students' Seminar/Presentation, In-Class of Summary of the Research Results worth 20%.
Assessment 5	Final Written Work: Assessment by Supervisor of Content of the Final Written Students' Research Work worth 50%.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Gujarati Damodar N, Basic Econometrics, McGraw-Hill Company, New York, 5th edition, 2009

Other Useful References

1. Department of Mathematics and Statistics, *Business Statistics*, Department of Mathematics and Computer Science, University of Technology Bookshop, July 2000.
2. Gipe G J, *How to Prepare a Thesis (Basic Steps and Hints about writing a Thesis for PNG Students)*, PNG University of Technology, Student Subject Manual, August 2007.
3. Gipe G J, *Demand theory and Estimation*, Student Subject Manual PNG University of Technology, August 2008.
4. Gipe G J, *Basic Statistical Models Defined*, PNG University of Technology, Student Subject Manual, September 2009.
5. Shadlow John, *Basic Statistical Inference*, Department of Mathematics and Computer Science, University of Technology Bookshop, March 2011
6. Shadlow John, *MA 367 Sampling and Survey*, Lecture Notes, University of Technology Bookshop, March 2005.
7. Stuart M, *Introduction to Statistical analysis for Business and Industry*, Dodder Headline group, London, 2003.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

COURSE STRUCTURE

BACHELOR OF BUSINESS IN INFORMATION TECHNOLOGY

First Year Code	First Semester Subject	Contact Hours	Credit
IS112	Introduction to Information and communication Technology	6	15
BM111	Introduction to Business Management	6	20
CD111	Professional Practice and Sustainable Development	6	15
MA114	Quantitative Methods I	6	21
		24	71

First Year Second Semester

Code	Subject	Contact Hours	Credit
AE121	Principles of Economics	6	20
BM121	Business Law	6	20
AC121	Principles of Accounting	6	20
MA124	Quantitative Methods 2	6	21
		24	81

Second Year	First Semester		
Code	Subject	Contact Hours	Credit
IS212	End User Computing	6	15
IS213	Database Systems (Data Management)	6	15
IS214	Data Communications and Networking	6	15
IS216	Introduction to Programming	6	15
		24	60

Second Year	Second Semester		
Code	Subject	Contact Hours	Credit
IS223	Object Oriented Programming with Java	6	15
IS225	Ethics and Professional Practice	6	15
IS226	Systems Analysis and Design	6	15
IS229	Web Design	6	15
		24	60

Third Year	First Semester		
Code	Subject	Contact Hours	Credit
IS312	Enterprise Database Systems	6	15
IS315	Systems Analysis and Design Project	6	15
IS316	Systems Implementation	6	15
IS318	IT Project Management	6	15
		24	60

Third Year	Second Semester		
Code	Subject	Contact Hours	Credit
IS321	Cloud Computing	6	15
IS325	Mobile Applications Development	6	15
IS327	Operating Systems	6	15
IS328	Electronic Commerce Technologies and Systems	6	15
		24	60

Fourth Year	First Semester		
Code	Subject	Contact Hours	Credit
IS411	Business Computing Experience	40	60
Elective subjects			
IS412	Final Year Project	36	60
		36-40	60

***** Please note that the Section Head will determine electives available to the students.**

Fourth Year	Second Semester		
Code	Subject	Contact Hours	Credit
IS421	Business Intelligence and Analytics	6	15
IS422	Management Information Systems	6	15
IS426	Information Systems Development Project	6	15
(Elective Subjects - One to be offered)			
IS424	Enterprise Systems	6	15
IS425	Information Systems Security	6	15
IS427	Network and Cyber Security	6	15
		24	60

***** Please note that the Section Head will determine electives available to the students.**

Bachelor in Business in Information Technology Graduate Statement

A Business Graduate will have an in-depth knowledge in the field of Business and will demonstrate effective communication and collaboration skills, uphold the value of independence, innovation and entrepreneurship, display critical and professional judgment and a global and ethical understanding

Information Technology Course Learning Outcomes (CLOs)

- CLO 1 Demonstrate a sound understanding of the organizational settings and the role of ICT and IS in organizations and society
- CLO2 Identify the user, business and organizational needs and evaluate the ICT systems, tools and their applications in the business environment,
- CLO3 Apply the methods, tools, skills and techniques used to plan, analyze, design, implement, manage and maintain well-structured and documented information products, services and systems with creativity and in accord with good ethics and professional conduct
- CLO4 Exhibit a range of technical, analytical, managerial, creative, interpersonal, collaborative and self-learning skills in order to contribute to real life ICT solutions
- CLO5 Recognize the threats and opportunities of ICT in business and society and respond appropriately to the related legal, ethical and philosophical issues
- CLO6 Take initiative, communicate effectively and be willing to self-assess performance

Graduate Attributes of PNG Unitech.

1. Lifelong learner
2. Critical thinker
3. Effective Communication
4. Cultural Modernist
5. Morally upright
6. Technologically Savvy

BACHELOR OF BUSINESS IN INFORMATION TECHNOLOGY

YEAR 1 SUBJECT SPECIFICATIONS

Subject Specification

Course(s):	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Introduction to Information and Communication Technology for Business
Subject Code:	IS112
Duration:	13 teaching weeks
Contact Hours:	6 hrs/week 6
Credit Points:	15 (2 hrs lectures + 2 hrs Tut+2 hrs lab + project)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis

This course introduces the student to ICT for business and services, discussing computing concepts, software, hardware & networking fundamentals, business productivity tools including email, word processing, spread sheet, database, presentation, publication, the internet and basic cloud computing services, online services & products.

Subject Topics

Topic	Topic Details
1. ICT for business and services,	Information and communication technology, Business and ICT
1. Computing concepts	Computing and concepts Operating system, RAM
3. Software	Basic Software,
4. Hardware and Networking Fundamentals,	Hardware components of a computer
5. business productivity tools	email, word processing, spread sheet, database, presentation, publication, the internet and basic cloud computing services, online services & products

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Identify ICT infrastructure and services.
2. Demonstrate an understanding of fundamental computing concepts and be able to operate a variety of hardware and software independently.
3. Examine computer networking and Internet-based services and products.
4. Create a variety of digital products using appropriate tools and applications.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Practical Lab Assessments	10%
2. Practical Project	30%
3. Tests (7.5% x 2) & Quizzes (2.5% x 2)	10%
4. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Practical Lab Exercises: Practical lab activities identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The lab sessions contribute 10% towards the final grade for the subject.

Assessment 2 Project: Practical major lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 1, 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 30% towards the final grade for the subject.

- Assessment 3** **Test(x2) & Quiz(x2):** A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. Both Tests and Quiz contribute 10% towards the final grade for the subject.
- Assessment 4** **FINAL EXAM:** A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook:

1. Achampong K, E. (2012). Introduction to Information and Communication Technology, LAP LAMPERT Academic Publishing

Relevant Unitech Policies:

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

YEAR 2 SUBJECT SPECIFICATOINS

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	End User Computing
Subject Code:	IS212
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15(2 hours lecture + 2-hour tutorial + 2 hours Lab)
Delivery Mode:	On campus
Prerequisites:	IS112/MA114
Subject Coordinator:	TBA

Synopsis:

The course basically captures the main areas highlighted as follow; Computer evolution and literacy, computation (Information processing and machine cycles), hardware (Main-Internal and External), software (Application & System), Networking, Internet & Security, Common problem solutions

Subject Topics

Topic	Content
1. People, Business, Society and Technology	a) Describe various technological tools being used to impact national and global issues. b) Summarize how technology has impacted the way we choose and consume products and services c) Characterize computer literacy and explain why it is important to be computer literate
2. Data, Computation and Information & Computer System Evolution	a) Explain the Functions of a Computer b) Describe How Computers Represent Data Using Binary Codes c) Describe the Evolution of Computer Systems
3. Computer Hardware (Internal and External Components)	a) Identify the Parts of a System Unit and Motherboard b) Describe Input/Output Devices and Their Uses c) Explain the Function of the Central Processing Unit d) Troubleshoot Common Computer Problems
4. Computer Software (System and Application)	a) Recognize the Purpose and Functions of Operating Systems b) Identify Types and Uses of Business Productivity Software c) Troubleshoot Common Computer Problems
5. Computer Network (Intranet & Extranet) and Internet (Web Services)	a) Discuss the Importance of Computer Networks b) Recognize the Importance of the Internet c) Discuss the Importance of Cloud Computing Services

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Identity computer evolution with various technological tools, the impacts and the digital divide (The ICT knowledge gulf-gap) nationally and globally.
2. Discuss I/O devices with motherboard components and match them to data processing and machine cycle.
3. Review, classify and experiment application and system software.

- Investigate computer networking, internet and security tools and services
- Examine and determine common end user computing problems (Hardware, Software, Network or Internet) and apply industry standard solutions.

Assessment Tasks and Weightings – 50% Continuous and 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Practical Lab Assessments 1.1 Software (5%) 1.2 Hardware (5%)	10%
2. Practical Project	30%
3. Tests and Quizzes 3.1 Tests (7.5% x 2) 3.2 Quizzes (2.5% x 2)	10%
4. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Practical Lab Exercises(x2): Practical lab activities identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The lab sessions contribute 10% towards the final grade for the subject.

Assessment 2 Project: Practical major lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 30% towards the final grade for the subject.

Assessment 3 Test(x2) & Quiz(x2): A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. Both Tests and Quiz contribute 10% towards the final grade for the subject.

Assessment 4 FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14 week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

- GO-All in One-Computer Concepts & Applications-3rd Edition-GASKIN, VARGAS, GEOGHAN, GRAVIETT-2019-Pearson Education, Inn

References and Readings

- Visualizing Technology-7th Edition-DEBRA GEOGHAN-2018- Pearson Education, Inn
- Technology in Action (Introduction)-15th Edition-A EVANS, K MARTIN, M A POATSY-2019- Pearson Education, Inn
- [Electronic resources or links to be uploaded to the Learning Management System – Google Classroom](#)

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course : Bachelor of Business in Information Technology (NQF Level 7)

Subject Name : Database Management (Data Systems)
Subject Code: IS213
Duration: 13 teaching weeks
Contact Hours : 6 hours per week
Credit Points: 15 (2 hours lecture + 2 hours tutorial + 2 hours lab)
Delivery Mode : On campus
Subject Coordinator: TBA

Synopsis

The objective of this course is to teach students how to deal with data, database, and database management systems and practice using database management software such as Microsoft ACCESS and MySQL. The emphasis of the lectures is on practical aspects of data modelling at the conceptual level such as creating entity relationship diagrams, normalization and finally implementing the data models using database management systems such as Access or MySQL. Main topics covered include components of DBMS, data design using ERD, conversion of ERD to relational schema, normalization, query, and SQL.

Subject Topics

Topics	Topic Contents
1. Database Systems	What is database, describe DBMS, Data Models: data models, data abstraction. relational database model, relations are implemented as tables in a relational DBMS. Relational databases schema and relational algebra. Entity relationship (ER) Modeling, extended entity relationship (EER) model, characteristics of good primary keys, flexible solutions for special data-modeling cases
2. Normalization of Database Tables	Relations, Keys, normalization of Database Tables in 1NF, 2NF and 3NF
3. Structured Query Language (SQL) in Databases	Basic commands and functions of SQL for data administration and data manipulation Advanced SQL and Database Schema Query in databases, JOIN operator, SQL functions to manipulate dates, strings, UNION, UNION ALL, INTERSECT, and MINUS, views and triggers, embedded SQL
4. Database design	Systems Development Life Cycle (SDLC), database design strategies
5. Transaction Processing and Concurrency control	Transaction Processing and Concurrency control, backup and recovery concepts. Distributed Database Systems: Distributed processing and database Characteristics of distributed DBS, Distributed database design. Database connectivity and web technologies include Database as a service, cloud computing, XML, Web-to-database middleware
6. Business Intelligence and Analytics	Business Intelligence (BI), big data, business analytics, and big data analytics, Reporting; Data, Text, and Web Mining, Mobile Intelligence, Data Warehouses

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Undertake data modelling at the conceptual level such as creating entity relationship diagrams and normalization
2. Design database based on ERD
3. Construct Database files.
4. Create Query and View files and demonstrate their uses.
5. Apply the normalization approach to developing data models.
6. Create database reports.
7. Demonstrate the use of a microcomputer Database Management System.
8. Design and write programs using the database.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Practical Project	20%
3. Test 1	10%
4. Class Engagement	10%
5. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Assignment 1:** This major assignment is designed to identify students' general understanding of concepts, definitions and explanations and their technical ability covered in the lectures. The assignment contributes 10% towards the final grade for the subject.
- Assessment 2** **Practical Project:** This practical is a major lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability covered in the lectures. The major practical project contributes 20% towards the final grade for the subject.
- Assessment 3** **Test 1:** A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. This test contributes 10% towards the final grade for the subject.
- Assessment 4** **Class Engagement:** This task designed to evaluate the engagement of students in class and their participation in lab sessions. This task contributes 10% towards the final grade for the subject.
- Assessment 5** **FINAL EXAM:** A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Carlos Coronel, Steven Morris (2015) Database Systems: Design, Implementation, and Management (11e), Australia: Cengage Learning.

References and Readings

1. Electronic resources or links to be uploaded to the Learning Management System – Google Classroom.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Data Communications and Networking
Subject Code:	IS214
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2 hours lecture + 2 hours tutorial + 2 hours lab)
Delivery Mode:	On campus
Prerequisites:	IS112
Subject Coordinator:	TBA

Synopsis

Topics may include basic types of data structures, data communications fundamentals, Internet and distributed computing, local area networks (LAN), wide area networks (WAN), network security and management issues, OSI and TCP/IP layered protocols; data transmission methods, signal encoding and digital data communication techniques; multiplexing methods.

Subject Topics

Topic	Content
1. Network Management	a) TCP/IP b) OSI Model
2. Types of computer network, standards, protocols and port;	a) Ethernet b) Network classification
3. Network media and topologies;	a) Wired and Wireless b) Topologies
4. Network Device and Tools	Networking software and hard
5. Network security	Network security
6. Network for Individual, SOHO and Business Use	Network needs and requirements

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Identify the computer networking concepts with standard network protocols and different types of networks;
2. Define various LAN/WAN technologies, functions and architectures;
3. Analyse the differences between centralized & decentralized systems;
4. Evaluate the nature of business information requirements to formulate a simple network design;
5. Identify and evaluate various security threats on data communication networks & network management issues;

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Practical Lab Assessments	10%
1.1 Software (5%)	
1.2 Hardware (5%)	
2. Practical Project	30%
3. Tests and Quizzes	10%
3.1 Tests (7.5 x 2)	
3.2 Quizzes (2.5 x 2)	

4. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1 Practical Lab Exercises(x2):** Practical lab activities identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The lab sessions contribute 10% towards the final grade for the subject.
- Assessment 2 Practical Project:** Practical major lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 30% towards the final grade for the subject.
- Assessment 3 Test(x2) & Quiz(x2):** A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. Both Tests and Quiz contribute 10% towards the final grade for the subject.
- Assessment 4 FINAL EXAM:** A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Behrouz Forouzan (2012) Data Communications and Networking (5th Edition), McGraw-Hill.

References and Readings

1. William Stallings (2014) Data and Computer Communications, 10th Edition, Pearson Education Inn
2. Electronic resources or links to be uploaded to the Learning Management System – Google Classroom.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (BCIT) (NQF Level 7)
Subject Name:	Introduction to Programming
Subject Code:	IS216
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15(2 Lecture 2 Tutorial 2 Lab)
Delivery Mode:	On campus
Prerequisites:	IS112/MA114
Subject Coordinator:	TBA

Synopsis

The basic concepts of programming are introduced, starting with the notion of an algorithm. The emphasis of this course is on developing the ability to write correct programs/solutions to solve practical computational problems.

Subject Topics and Contents

Topic	Content
1. Procedures, Programs, and Computers	Computing concepts, procedures & program algorithm
2. Memory management, Data Types and Operators	a) Variable and constant matching with data types (Memory Management-Integer, Character, Boolean, String, Double); b) Operators (Logical, Relational and Others) with their application
3. Data flow control structures	a) Main program data flow control structures (Sequential, Decision/Branching and Looping/Iteration) b) Where and when appropriate in use cases
4. Language specific syntax	Preferred programming language (C++, Python, VB.NET, Java etc.) with identifying the syntax and development tool
5. OOP looking ahead	Programming fundamental concepts with OOP concepts and beyond

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Review computing concepts, procedures & identify program algorithm
2. Define and distinguish variable from a constant & match to data types; Name, match and distinguish operators with their application
3. Identify main program data flow control structures; Discuss where and when appropriate in use cases
4. Choose preferred programming language with identifying the syntax and development tool
5. Match programming fundamental concepts with OOP concepts and beyond

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Practical Lab Assessments 1.1 Software (5%) 1.2 Hardware (5%)	10%
2. Practical Project	30%

3. Tests and Quizzes 3.1 Tests (7.5 x 2) 3.2 Quizzes (2.5 x 2)	10%
4. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

- Assessment 1 Practical Lab Exercises:** Practical lab activities identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The lab sessions contribute 10% towards the final grade for the subject.
- Assessment 2 Practical Project:** Practical major lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 1, 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 30% towards the final grade for the subject.
- Assessment 3 Test(x2) & Quiz(x2):** A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. Both Tests and Quiz contribute 10% towards the final grade for the subject.
- Assessment 4 FINAL EXAM:** A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Prelude to Programming, 6th Edition- Stewart Venit, Santa Fe College Elizabeth Drake, Santa Fe College-2015-Pearson Education, Inn

References and Readings

1. Problem Solving and Programming Concepts, 9th Edition-Maureen Sprankle, Jim Hubbard-2012-Pearson Education Inn
2. Electronic resources or links to be uploaded to the Learning Management System – Google Classroom

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Object Oriented Programming with Java
Subject Code:	IS223
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2 Lecture 2 Tutorial 2 Lab)
Delivery Mode:	On campus
Prerequisites:	IS216
Subject Coordinator:	TBA

Synopsis

Main topics may include: To develop familiarity with Object Oriented Concepts, Classes and their usability in languages and to let them implement those concepts in the lab keeping in mind the real-world problems. Solid introduction to Object Oriented paradigm of application development. The language that will be used to achieve this goal is Java. As a result, a thorough understanding of Java is also expected to take place. Database interaction for desktop applications built using Java will be touched upon.

Subject Topics

Topic	Content
1. Introduction to classes and objects, familiarizing with Java syntax, Control statements	a) Introduction to Java b) Primitive Types & If/else, loops, switch statement, defining method c) Instance variables, set and get Methods d) Primitive Type vs Reference Type
2. Object oriented programming a. Inheritance b. Polymorphism	a) Initializing Objects with Constructors b) Inheritance, Super classes and subclasses c) Relationship between super classes and subclasses d) Method Overriding, Overloading
3. A deeper look in Java classes and objects a. Encapsulation b. Data hiding c. Data abstraction	a) Default Constructor and Constructor Overloading b) Composition, Enumerations c) Encapsulation d) Abstraction
4. Arrays in Java	a) Arrays: Declaring and Creating Arrays b) Iterating Arrays, Fetching and Changing Elements c) Using Multidimensional Arrays
5. GUI components + Graphics, Exception handling, Accessing Database with JDBC	a) GUI Programming: Overview of Swing components b) Displaying Text and Images in Window c) Adding Text Fields and Buttons in Window d) Exceptional handling e) Checked and Runtime exceptions

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Differentiate between OOP and procedural paradigm, demonstrate understanding of and differences between classes, objects and methods.
2. Demonstrate understanding of static methods and fields, exhibit their understanding of arrays in Java and how to use the enhanced for statement to iterate through arrays.
3. Use the concepts of encapsulation, data hiding, inheritance, superclass, subclass, polymorphism, constructors in design and development of OO applications.
4. Demonstrate an understanding of graphical user interface (GUI), Create and manipulate basic components like labels, lists, panels, buttons used in building GUI.
5. Demonstrate the understanding of the concept of exception handling and how it is actually used in Java.
6. Store and retrieve data from a RDMS by using JDBC.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignments/ Exercise (10% x 2)	20%
2. Quiz	10%
3. Project: Group/individual 3.1 Problem Difficulty/Depth Level (5%) 3.2 Execution (10%) 3.3 Presentation and Q&A (5%)	20%
4. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Short Assignments(x2):

- a) Logic Building – Logical questions / concepts questioning student's practical approach in producing a Business Solution.
- b) Productivity tools professionally meeting minimum best practice standard's requirements. Each assignment contributes 10% towards the final grade for the subject.

Assessment 2 Quiz: A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Quiz contributes 10% towards the final grade for the subject

Assessment 3 Project: Practical major tutorial/lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 20% towards the final grade for the subject.

Assessment 4 FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. "Java How to Program", (2014) 10th Edition Late Object Version by Deitel & Deitel.

References and Readings

1. "Object-Oriented Software Development Using Java", --2nd Editions, Addison Wesley 2003
2. Electronic resources or links to be uploaded to the Learning Management System – Google Classroom.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Ethics and Professional Practice
Subject Code:	IS225
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	16 (2 Lecture 4 Tutorial)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis

Main topics may include: A strong understanding of the legal, ethical and societal implications of information technology. Examine issues surrounding professional code of ethic, file sharing and infringement of intellectual property; security risk assessment; Internet crime; identify theft; employee surveillance; privacy; compliance, social networking and the ethics of Information Technology corporations. Ethical improvement of decision-making for current and future business managers and IT professionals. Business decision makers with the understanding of ethics and IT needed for ongoing business success.

Subject Topics

Topic	Content
1. The role and perspective of information systems in today's business	a) Role of IS in business IT b) Contemporary approaches to information systems c) Issues of today's business
2. Business processes and types of information systems	a) Business processes and information systems b) ERP System c) SCMS d) Enterprise Applications
3. Systems for Competitive Advantage and management issues	a) Business Ethics in organizations b) Competitive Advantage c) Impact of IT in organizations d) Management Issues
4. IT Infrastructure and its components; management of Data Resources	a) Contemporary Hardware Platform Trends b) Contemporary Software Platform Trends c) Using Databases to Improve Business Performance and Decision Making d) Finalize the designs for development
5. System development and building approaches	a) System development b) Discuss different models for implementation c) Discuss feedback mode with user d) Deployment and Maintenance strategies

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. A strong understanding of the legal, ethical and societal implications of information technology.
2. Examine issues surrounding professional code of ethic, file sharing and infringement of intellectual property, security risk assessment, Internet crime, identify theft, employee surveillance, privacy, compliance, social networking and the ethics of IT corporations.
3. Improvement of ethical decision-making for current and future business managers and IT professionals.
4. Focus on preparing the individuals who are primarily responsible for addressing ethical issues in today's workplace. Future business managers and IT professionals learn how to examine the various ethical situations that typically arise in IT and gain experience practical advice for addressing the issues.
5. Business decision makers with the understanding of ethics and IT needed for ongoing business success.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignments/ Exercise (10% x 2)	20%
2. Quiz	10%
3. Project: Group/individual 3.1 Proposal (2.5%) 3.2 Ethical Issues (5%) 3.3 Proposal Solution (10%) 3.4 Presentation (2.5%)	20%
4. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Short Assignments(x2):

- a) Ethics in Business IT- Professional report/article template development validating student's practical approach in producing a standardize document. In this case, students have to gather the business ethical issues, their impact on organizations and consequences.
- b) Productivity tools professionally meeting minimum best practice standard's requirements. Each assignment contributes 10% towards the final grade for the subject

Assessment 2 Quiz: A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Quiz contributes 10% towards the final grade for the subject.

Assessment 3 Project: Practical major tutorial/lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 20% towards the final grade for the subject.

Assessment 4 FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Mike Quinn, (2013). "Ethics for the Information Age". 5th Edition, Addison-Wesley.

References and Readings

1. George W. Reynolds, 2010. "Ethics in Information Technology", 4th Edition. ISBN-13: 978-0-538-74622-9
2. Electronic resources or links to be uploaded to the Learning Management System – Google Classroom.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>), PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Systems Analysis & Design
Subject Code:	IS226
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15(2 Lecture 2Tutorial 2 Lab)
Delivery Mode:	On campus
Prerequisites:	IS213
Subject Coordinator:	TBA

Synopsis

Main topics may include: The four major phases (planning, analysis, design & implementation) of the Systems Development Life Cycle (SDLC), key principles of SDLC, tools and techniques, business needs and organizational information requirements, systems modelling techniques, requirements analysis strategies, requirements elicitation techniques, system acquisition strategies, program design, database design, architecture design, and implementation of IT systems with support strategies techniques.

Subject Topics

Topic	Content
1. Systems Development Life Cycle	a) Four major phases (planning, analysis, design & implementation) b) Brief description of all phases with examples c) including key principles of SDLC
2. Business needs and organizational information	a) Business requirement gathering b) Structure of organization c) System identification
3. Requirements analysis, Systems modelling	a) Analyse user preferences b) Corporate user requirement into organizational structure a) Feasibility study b) Model requirement into system
4. Program design, database design, architecture design	a) Use Diagrams to incorporate the user requirements b) Front-end design and back-end design c) Finalize the designs for development
5. Implementation of IT systems with support strategies techniques	a) System development b) Discuss different models for implementation c) Discuss feedback mode with user d) Deployment and Maintenance strategies

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Compare and contrast the traditional systems development life cycle to the structured systems development cycle approach.
2. Demonstrate the use of systems analysis tools such as flowcharts and data flow diagrams.
3. Demonstrate the value of documentation during the systems life cycle.
4. Evaluate different testing routines used in Management Information Systems.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignments/ Exercise (10% x 2)	20%
2. Quiz	10%
3. Project: Group/individual 3.1 Proposal (5%) 3.2 Proposal Design/Model (10%) 3.3 Presentation (5%)	20%
4. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Short Assignments(x2):

- a) Template design- Professional report/article template development validating student's practical approach in producing a standardize document. In this case, students must gather the user requirements, analyses them and the template design.
- b) Productivity tools professionally meeting minimum best practice standard's requirements. Each assignment contributes 10% towards the final grade for the subject.

Assessment 2 Quiz: A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Quiz contributes 10% towards the final grade for the subject.

Assessment 3 Project: Practical major tutorial/lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 20% towards the final grade for the subject.

Assessment 4 FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Dennis, A., Wixom, B. & Roth, R. (2012). Systems Analysis and Design. (5th Ed) – NJ: Wiley & Sons, Inc.

References and Readings

1. Kenneth E. Kendall, Julie E. Kendall (2013) Systems Analysis and Design (9th Edition). Pearson
2. Electronic resources or links to be uploaded to the Learning Management System – Google Classroom.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (BCIT) (NQF Level 7)
Subject Name:	Web Design
Subject Code:	IS229
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2hrs Lecture +2hrs Tutorial + 2hrs Lab)
Delivery Mode:	On campus
Prerequisites:	IS216
Subject Coordinator:	TBA

Synopsis

This course is an introduction to web designing which may include history and development of web designing and HTML, web design principles and publishing guidelines, use of HTML5 (mark-up) tags, CSS3, JavaScript and multimedia content (graphics, audio, video, text), web design applications, online web design tools and platforms and Website promotion through search engines or other advertising means.

Subject Topics Contents

Topic	Content
1. Web Design - Introduction to Web Designing and HTML	a. Web design Concepts, history & HTML development b. Web design principles, publishing guidelines, Website promotion through search engines and other advertising means c. Multimedia content (graphics, audio, video, text), web design applications, tools and platforms
2. Hyper Text Mark-up Language - (standard version)	HTML5 Tags and Elements – Syntax and Usage
3. Cascading Style Sheet (CSS) – (standard version)	Styles, CSS3, Syntax and application
4. Interactive/Responsive Design	JavaScript – syntax and application and other available design framework

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understand web design concepts, tools and applications;
2. Design web pages to publish information in text and multi-media formats using standard versions of the Hyper Text Mark-up Language, Cascading Style Sheets and related tools;
3. Develop a web site that targets a particular audience using available software;
4. Utilize various online platforms to publish information

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignments 1.1 Online Web Applications (10%) 1.2 Web Design Using HTML5 and Text/Web Editor (10%) 1.3 Web Design Using HTML5x CSS3 (10%) 1.4 Web Design Project (Group) All Topics/Specific Themes (10%)	40%

2. Test	10%
3. Final Examination	50%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Assignment 1:

- Online web applications:** Online activities enabling students to interact online and identify design features of general-purpose web applications and related outputs to be able to relate to web pages created using Text or web editors using HTML, CSS and JavaScript. Online activities contribute 10% towards the final grade for the subject.
- Assignment 2 on Web design using Text/Web Editor:** First assignment covers the use of HTML5 tags and introductory CSS3 in Web designing incorporating the syntax, structure and designs covered in related topics. This assignment constitutes 10% towards the final grade for the subject.
- Assignment 3 on Web design using Text/Web Editor:** The second assignment includes all in Assessment 1 b above plus different applications of CSS3 which consist of 10% of the final grade for the subject.
- Assignment 4 on Web Design group project based on themes:** A final project assessing the students' comprehension and application of related topics including web design principles, HTML, CSS, responsive and interactive design based on given or chosen themes or cases. A presentation component can be included to assess communication and presentation skills.

Assessment 2 Test: A concept based closed book assessment, testing students' skills of interpreting written expression and syntax covered as well as the general comprehension of the subject.

Assessment 3 FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts and application covered in the subject. The Examination contributes 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

- Thomas A Powel, "HTML and CSS: The Complete Reference", Fifth edition, McGraw Hill (2010)

References and Readings

- Anselm Bradford and Paul Haine, "HTML5 Mastery: Semantics, Standards, and Styling", A press (2011)
- Electronic resources or links to be uploaded to the Learning Management System – Google Classroom.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

YEAR 3 SUBJECT SPECIFICATIONS

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name :	Enterprise Database Systems
Subject Code:	IS312
Duration:	13teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	15 (Lecture = 2. Tutorial = 2 and Laboratory = 2)
Delivery Mode :	On campus
Prerequisites:	IS 213
Co-requisites:	IS226 Systems Analysis & Design
Subject Coordinator:	TBA

Synopsis

Topics may include an overview of main enterprise database systems, an overview of database management, architecture for database systems, relational systems: relational database, the SQL language, base tables, indexes, querying the system catalog, view definition, DML operations on views, logical data independence, advantages of views. Embedded SQL, relational model, relational data structures, distributed systems, object-oriented databases, cloud database, security, backup and recovery, physical storage management, software development for reporting and data entry, Oracle implementation.

Subject Topics

Topic	Content
1. Course Overview and Introduction to enterprise database systems	DBMS has important technological, managerial, and cultural consequences for an organization. History from personal database systems via enterprise database systems to cloud database systems. an overview of enterprise database systems including database management, architecture for database systems, relational systems, cloud database systems, SQL server, Oracle database systems
2. Advanced Data Modelling	the extended entity relationship (EER) model How entity clusters are used to represent multiple entities and relationships The characteristics of good primary keys and how to select them How to use flexible solutions for special data-modelling cases design Converting an ER diagram into a relational Database schema. internal architecture of a database system
3. Advanced SQL	advanced SQL JOIN operator syntax, subqueries and correlated queries, SQL functions to manipulate dates, strings, and other data, relational set operators, create and use views and updatable views, create and use triggers and stored procedures, create embedded SQL, Formulate queries in SQL
4. Database connectivity and web technologies	Database as a service, cloud computing, XML, Web-to-database middleware Student read it, not examinable
5. Cloud Database System	State of art Cloud Database Systems, including Amazon Cloud Database Systems (Amazon Web Services), Microsoft SQL Azure, and Alibaba Cloud Database Systems, NoSQL Database Systems.
6. Design of enterprise database systems	Methodology of Design of enterprise database systems (e.g. Lifecycle). Critical Factors for developing enterprise database systems as a platform and environment, advanced issues in relational database design and management

7. Mid Semester Review	Overview and understanding of LNs 1-6
8. Enterprise Information Systems and Enterprise analytics	Enterprise Information Systems, business intelligence, and Enterprise analytics, big data analytics, cloud analytics and their impacts on Enterprise Systems.
9. Database Administration and Security	Data, databases play a critical role in an organization. the database administrator's managerial and technical roles. Data security, database security, and the information security framework. Several database administrations tools and strategies. Develop and administer a security policy for the database.
10. Introduction to SQL server	Microsoft SQL server, latest version for enterprise solution, techniques for enterprise database administration. How various technical tasks of database administration are performed with SQL server. Control and configure the physical storage requirements of a database and administer enterprise level database systems with SQL Server
11. Introduction to Oracle	Oracle as an enterprise solution, based on trial system (see YouTube), and slides available online, if no materials are available. How various technical tasks of database administration are performed with Oracle. Control and configure the physical storage requirements of a database and administer enterprise level database systems with Oracle
12. Practice with either SQL Server or Oracle	Practice with either SQL Server or Oracle. Design and implement a basic backup and recovery strategy and develop software for reporting and database entry for enterprise database systems with Oracle. Or Design and implement a basic backup and recovery strategy and develop software for reporting and database entry for enterprise database systems with SQL server
13. Course Review	Overview and understanding of LNs 8-12

Subject Learning Outcomes (SLOs)

Upon successful completion of this subject, students should be able to:

1. Demonstrate a good understanding of the state-of-art enterprise database systems and explain the internal architecture of a database system;
2. Develop and administer a security policy for the database;
3. Control and configure the physical storage requirements of a database and administer enterprise level database systems;
4. Formulate queries in SQL and use embedded SQL;
5. Design, implement, and test a substantial business database application for a given DBMS environment;
6. Communicate and describe database systems and research issues with a professional approach in a written documentation;
7. Design, implement and administer DBMS, contain a strong element of practical database design with appropriate commercial software (e.g., Oracle, Microsoft SQL Server);
8. Design and implement a basic backup and recovery strategy and develop software for reporting and database entry for enterprise database systems.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Test	10%
3. Assignment 2	20%
4. Engagement in Class	10%
5. Final Examination	50%

TOTAL	100 %
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Students must also refer to the Subject Assessment Details.

- Assessment 1 Individual Assignment:** A student must select at least two papers (one is journal paper; another is conference proceedings paper) and other 5 documents on the Web (e.g. Google Scholar or Research Gate or Gartner or Forrester). Based on the reading of the selected papers and documents, the student is asked to develop a research paper on the state of art enterprise database systems based on LNCS of Springer. The following topics might be useful, but not limited.
- enterprise database systems
 - enterprise systems
 - enterprise analytics
 - cloud database systems.
- The final artefact of your assignment or report should include the following:
1. An abstract of your assignment consists of 150-180 words.
 2. A report length is between 3000-3500 words.
- The student is advised to select his or her topic for the assignment based on one or two of the technical topics of interest include but are not limited to, see the listed topics in the class.
- Assessment 2 Test:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of LNs 1-6. The test will be given in week 7 and will comprise 10 % of the total percentage points.
- Assessment 3 Assignment 2 (Team assignment and practice):**
- Each team (2 students ONLY) will write a report of 4000-4500 words based on one of the following choices.
 1. Case study on enterprise database systems available on global market (see documents from Gartner or IDC).
 2. Practice on either Oracle or MS SQL Server
 - The report should demonstrate that the team has thoroughly researched the keywords and the key issues of their selected statement/topic including any existing arguments.
 - Topic Selection: Student teams must select one of the topics listed in the class based on the principle of “first in, first select” given by the lecturer.
- Assessment 4 Class Engagement:** Students will discuss in the class on a number of topics with lecturer and other students. The class engagement will be assessed weekly, comprising 10 % of the total percentage points
- Assessment 5 FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of enterprise database systems. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Coronel, C and S, Morris M, (2018). Database Systems: Design, Implementation, and Management. 12th Edition. Couse Technology, Cengage Learning.
2. Chmel M and V Muzny, (2020). SQL Server 2019 Administrator's Guide: A Definitive Guide for DBAS to Implement, Monitor, and Maintain Enterprise Database Solutions. Second Edition:

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course;	Bachelor of Business in Information Technology (BBIT) (NQF Level 7)
Subject Name:	Systems Analysis and Design Project
Subject Code:	IS315
Contact hours:	6 hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode:	On campus
Prerequisites:	IS216/IS226
Subject Coordinator:	TBA

Synopsis

This project-based course allows students to implement skills and knowledge acquired previously in order design an information system. The topics may include techniques and methods of systems analysis and design. A case study and team work involving the analysis of a small business, design of a computer system for the small business, documentation of the system, and oral presentation of the proposed system. Each student should do an independent case study.

Subject Topics

Topic	Content
1. Systems Analysis & Design Review	<ul style="list-style-type: none">• A review of systems analysis and design concepts and applications• Project Identification based on Business/User Needs and Requirements
2. Systems Project	Practical work including Project Plans, systems proposal, systems prototype and final presentation

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Apply the systems analysis skills learned in IS 226 to practical use in a business environment;
2. Understand the role of the systems analyst in the Information Technology industry;
3. Develop a computerized solution to a business problem from the ground up;
4. Work with the non-technical staff within a business organization in order to properly define the business problem under investigation;
5. Deliver professional verbal and written presentations in a clear, concise and organized fashion.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Documentation 1.1 Project Plan(s) (5%) 1.2 Project Proposal – (30%)	35%
2. Systems Prototype (Software) – 2.1 Software (35%) 2.2 Relevant Documentations/instructions (5%)	40%
3. Presentation (15%)	15%
4. Others (10%)	10%
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1

Project Documentations:

- A. **A project plan** which is expected to be reviewed midway during the project – 5%.
→ Students are to be guided into creating and revising a project plan.

- B. **A detailed project proposal** (which should include the findings from the analysis of the current system and design of the proposed system) – 30%.

→ Students are to clearly understand and define the issue, situation or problem with the current system and to design the intended system whilst working on a sample or prototype.

Assessment 2 Sample System:

- A. A system prototype or sample depicting major or selected components of the intended system as defined in the systems proposal. – 35%

- B. Related documentations for example a user manual – (5%)

Assessment 3 Assignment 2 (Team assignment and practice):

- Each team (2 students ONLY) will write a report of 4000-4500 words based on one of the following choices.
 1. Case study on enterprise database systems available on global market (see documents from Gartner or IDC).
 2. Practice on either Oracle or MS SQL Server
- The report should demonstrate that the team has thoroughly researched the keywords and the key issues of their selected statement/topic including any existing arguments.
- Topic Selection: Student teams must select one of the topics listed in the class based on the principle of “first in, first select” given by the lecturer.

Assessment 4 Presentation: A final class presentation of the project – 15%

Assessment 5 Others: 10% is set aside to be allocated to students according to the nature of project or situation and student efforts considering abnormal cases, availability of appropriate resources, use of appropriate or alternative tools, progressive reporting, etc...

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook:

1. Kenneth E. Kendall, Julie E. Kendall. (2013). Systems Analysis and Design (9th Edition). Pearson.

References and Readings

1. Shelly, G. B. and H. J. Rosenblatt. (2012). Systems Analysis and Design, 9th Edition. Cengage Learning
2. John W. Satzinger J. W; R. B. Jackson and S. D. Burd. (2011). Systems Analysis and Design in a Changing World. 6th Edition. Course Technology.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name :	System Implementation Project
Subject Code:	IS316
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode :	On campus
Prerequisites:	IS223

Synopsis

The course does a review of modern systems development. The importance of structured techniques in analysis, design and programming is implemented with emphasis on object-oriented analysis and design. Interactive and event-based applications are developed. It exposes students to the review of modern development environments and various integrated applications that are accessed and referenced to support application development. Database connectivity technologies and a particular client/server model are adopted for development. Application development process occurs using interpreters and compilers, code generators and 4th generation languages. Database applications can be developed by linking applications to external databases with the employment of Standard Query languages (SQL) for data processing tasks. Students taking this subject will undertake a major group project.

Subject Topics

Topics	Topic Details
1. Project Planning Review	1. Project Identification 2. Project Schedule/Gantt Chart
2. Implementation of Systems Analysis & Design Principles	3. System Requirements Specification (SRS)
3. Information Systems Deliverables	4. Development of GUI, menus, database, tables, queries, reports 5. Fully Functional Information System software 6. User Manual 7. Information System Presentation

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. SLO1: Use a contemporary development environment to develop interactive computer applications.
2. SLO2: Apply structured analysis and design techniques.
3. SLO3: Design and implement systems using modern development techniques.
4. SLO4: Design database systems and applications and connect to external databases.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting
1. Project 1.1 Project Identification & Project Plan/Gantt Chart – 10% 1.2 System Requirements Specification – 30% 1.3 Information System – 40% which is decomposed as follows: 1.3.1 Development of GUI, Menus, Database, Tables, Queries, Reports – 20% 1.3.2 Fully functional system – 20%	100 %

1.4 User Manual – 10%	
1.5 Group Presentation – 10%	
TOTAL	100 %

Students must also refer to the Subject Assessment Details.

Assessment 1 Project:

A group-based project evaluating the understanding of students in the implementation of small-scale information systems. The assessment criteria (100% weighting) are further decomposed as per the following deliverables:

1. Project Identification & Project Plan/Gantt Chart – 10%
2. System Requirements Specification – 30%
3. Information System – 40% which is decomposed as follows:
 - a. Development of GUI, Menus, Database, Tables, Queries, Reports – 20%
 - b. Fully functional system – 20%
4. User Manual – 10%
5. Group Presentation – 10%

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Kendall K.E and J.E. Kendall. (2014). Systems Analysis and Design. 9th Edition. Pearson Education Inc.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name	IT Project Management
Subject Code	IS318
Duration	13 teaching weeks
Contact hours	6 hours per week
Credit Points	15(Lecture = 2. Tutorial = 2 and Laboratory = 2)
Delivery Mode	On campus
Prerequisites	IS226
Subject Coordinator	TBA

Synopsis

Introduction to project management. Models of project management. Tools and techniques for project management. Organizing a project. Defining project scope, objectives and purpose. Defining the work breakdown structure. Communicating the aims of the project. Structuring a project plan. Managing a project. Controlling quality, cost, time and risk. Monitoring a project. Team dynamics. Introduction to computer tools for project management. Defining tasks and resources and assigning responsibility. Understanding GANNT charts. Monitoring and marking off progress.

Subject Topics**Subject Learning Outcomes (SLOs)**

Topic	Content
1. Defining Scope	a) Defining the project, Importance of Project Management, b) Project Management Framework, c) <u>Project Management: An Integrated Approach</u>
2. Data Flow Diagram, ER Diagram	a) Responsibility matrices, Project communication plan, b) Factors influencing the quality of estimates, Estimating guidelines, c) Methods for estimating project times and costs, d) <u>Creating a database for estimating</u>
3. Work Breakdown Structure	a) Level of Detail for Activities, b) Dividing project into small chunks, c) <u>Extended Network Techniques to Come Closer to Reality.</u>
4. Network Diagram, Gantt Chart	a) Developing the Project Network, b) Network Computation Process based on Activity-on-Node, c) <u>Using the Forward and Backward Pass Information,</u>
5. Cost and Budgeting	a) Risk Management Process, b) Contingency Planning,
6. Risk assessment.	a) Opportunity Management, b) Contingency Funding and Time Buffers.

Subject Learning Outcomes (SLOs)**Upon completion of this subject, students will be able to:**

1. Explain the ten knowledge areas of the Project Management Body of Knowledge (PMBOK);
2. Manage simple projects, including planning, budgeting, scheduling and monitoring;
3. Select, justify and use project management techniques and tools for IT projects;
4. Handle time management skills and cost budgeting of a project; use computer-based tools to assist with the tasks of project planning and management,
5. Provide accurate risk assessment and protection plan for a project.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment / Exercise 1st (10% x 2)	20%
2. Tests and Quizzes 2.1 Quizzes (10% x 1)	10%
3. Project: Group / Individual 3.1 Proposal (5 x 1) 3.2 Proposed Design/Model (10 x 1) 3.3 Q & A (5 x 1)	20%
4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 Short Assignments(x2):

- Template design- Professional report/article template development validating student's practical approach in producing a standardize document. In this case, students must gather the user requirements, analyses them and the template design.
- Productivity tools professionally meeting minimum best practice standard's requirements. Each assignment contributes 10% towards the final grade for the subject

Assessment 2

Quiz: A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Quiz contributes 0% towards the final grade for the subject.

Assessment 3

Project: Practical major tutorial/lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 20% towards the final grade for the subject.

Assessment 4

FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 60% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Gray, C and Larson, E. (2014). Project Management – The Managerial Process. 6th Edition. New York. McGraw-Hill.

References and Readings

1. Cadle, J., and Yates, D. eds. (2014). Project Management for Information Systems. 6th Edition. Essex, England. Prentice-Hall.

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name :	Cloud Computing
Subject Code:	IS321
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	15 (Lecture = 2. Tutorial = 2 and Laboratory = 2)
Delivery Mode :	On campus
Prerequisites:	IS213
Subject Coordinator:	TBA

Synopsis

This course covers topics and technologies related to Cloud and Cloud Computing. Students will explore solutions and learn design principles for building large network-based systems to support both computer and data intensive computing across geographically distributed infrastructure. Topics include resource management, programming and application models, system characterizations, and implementations. Students will get an insight into cloud computing systems such as Amazon EC2 and S3, Microsoft Azure, Google AppEngine, MapReduce, Hadoop, and many others.

Subject Topics

Topic	Content
1. Course Overview and Introduction to Cloud Computing	Introduction to Myself, Why Cloud Computing, Course Description, My Teaching Philosophy. Introduction to Cloud Computing: Concepts, Technology, Architecture and services Big Data Analytics for Cloud Computing, Data and Evolution, Big Data and Big Data for DM artificial intelligence (AI), Intelligent Big Data Analytics A Strategic Framework of Intelligent Big Data Analytics Cloud analytics for integrating Big Data Analytics with cloud computing
2. Understanding Cloud Computing	Origins and Influences, Evolution of Cloud Computing, Basic Concepts and Terminology, Goals and Benefits, Risks and Challenges
3. Fundamental Concepts and Models of Cloud Computing	Roles and Boundaries, Cloud Characteristics, Cloud Delivery Models, Types of Cloud Delivery (Platform as a Service, Software as a Service, Infrastructure as a Service (IaaS), Cloud Services, Cloud Delivery as a service Other cloud services, Trade-off in cost to install versus flexibility Cloud Deployment Models for Cloud Computing, Migrating to Cloud
4. Cloud-Enabling Technology	Broadband Networks and Internet Architecture, Data Center Technology Data Storage Technology, Virtualization Technology (Virtualization and Cloud Delivery in Cloud Computing Virtualization in Cloud Infrastructure, Virtual Infrastructure, Virtual Machine), Web Technology Multitenant technology, Green Computing, Service Technology, APIs
5. Fundamental Cloud Security	Confidentiality, Integrity, Authenticity, Availability; Threat, Vulnerability, Risk, Security Controls, Security Mechanisms, Security Policies Threat Agents, Cloud Security Threats, etc
6. Cloud Infrastructure Mechanisms	Logical Network Perimeter, Virtual Server, Cloud Storage Device, Cloud Usage Monitor, Resource Replication, Ready-Made Environment

7. Mid Semester: Review of Cloud Computing	Midterm Test Guide for midterm test, Review LN 1-6 Core of cloud computing
8. Cloud Management Mechanisms	Remote Administration System, Resource Management System, SLA Management System, Billing Management System
9. Cloud Security Mechanisms	Encryption, Hashing, Digital Signature, Public Key Infrastructure (PKI), Identity and Access Management (IAM), Single Sign-On (SSO), Cloud-Based Security Groups, Hardened Virtual Server Images
10. Fundamental Cloud Architectures	Workload Distribution Architecture, Resource Pooling Architecture, Dynamic Scalability Architecture, Elastic Resource Capacity Architecture, Service Load Balancing Architecture, Cloud Bursting Architecture, Elastic Disk Provisioning Architecture, Redundant Storage Architecture
11. Cloud Delivery Model Considerations	Cloud Delivery Models: The Cloud Provider Perspective Cloud Delivery Models: The Cloud Consumer Perspective
12. Cost Metrics, Pricing Models, Service Quality Metrics and SLAs	Cloud Economics, Business Cost metrics, Cloud Usage Cost Metrics, Cost Management Considerations, Service Quality Metrics, SLA Guidelines
13. Course Review	Summarise IS321: Cloud Computing Examinable topics in the final exams: where and what Strategies for preparing for the final examination from an IT perspective

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Critically evaluate factors driving the need for cloud computing, identify key elements of cloud computing and the role of IT governance for cloud computing
2. Understand and appreciate the need for cloud computing, and identify their use in industrial applications;
3. Discuss managerial issues to be evaluated between existing systems and migration to the cloud, develop a migration management plan for a cloud-based solution;
4. Differentiate between various services offered by cloud vendors and outline the associated benefits and constraints of each;
5. Coordinate operational processes in relation to service management, monitoring, administration, support and control of cloud computing environments;
6. Demonstrate a broad understanding of cloud software application development platform through the investigation of real-world web services;
7. Apply knowledge of the cloud application development platform for a range of e-business systems such as e-health, e-banking, e-learning and e-government;
8. Adopt problem solving strategies to communicate solutions with key stakeholders for a variety of issues relating to cloud computing.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	10%
2. Tests	10%
3. Assignment 2	20%
4. Class Engagement	10%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Individual Assignment:** A student must select at least two papers (one is journal paper; another is conference proceedings paper) from the IS 321 published in Google Classroom or the Web (Google Scholar or ResearchGate). Based on the reading of the selected papers, the student is asked to develop a research paper based on IEEE standard and template for paper, that is, IEEE Cloud 2019 at <http://conferences.computer.org/cloud/2019/cfp/>. Or LNCS of Springer.
- The final artifact of your assignment or report should include the following:
1. An abstract of your assignment consists of 150-180 words.
 2. A report length is between 3000-3500 words.
- The student is advised to select his or her topic for the assignment based on one or two of the technical topics of interest include but are not limited to, see the listed topics in the class.
- Assessment 2 Test:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of topics 1-6. The test will be given in week 7 and will comprise 10 % of the total percentage points.
- Assessment 3 Assignment 2 (Team assignment):** Each team (2 students ONLY) will write a report of 4000-4500 words on one of the listed Statements/Topics. The report should demonstrate that the team has thoroughly researched the keywords and the key issues of their selected statement/topic including any existing arguments.
- Topic Selection
- Student teams must select one of the topics listed in the class based on the principle of “first in, first select” given by subject coordinator.
- Assessment 4 Class Engagement:** Students will discuss in the class on a number of topics with lecturer and other students. The class engagement will be assessed weekly, comprising 10 % of the total percentage points.
- Assessment 5 FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of cloud computing. The examination will make up 50 % of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Erl T.; Z, Mahmood and R, Puttini (2013). Cloud Computing: Concepts, Technology & Architecture. PRENTICE HALL
2. Sun Z (2020). Lecture Notes and Other Teaching Materials, PNG University of Technology, Lae.

References

1. Nayan R. (2016). Cloud Computing, The MIT Press

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Mobile Application Development
Subject Code:	IS325
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode:	On campus

Prerequisites: IS313

Subject Coordinator: TBA

Synopsis

This course introduces the programming of applications for smart mobile phones and tablets. The intention of this course is to provide students with information to make their own applications for mobile phones and tablets. Main focus is on Android OS as development environment due to the diversity of Android-based devices, as well as the fact that the IDE and Android OS is open source making it more readily available to programmers to access and experiment with it; and Java becomes the obvious choice for the programming language. The course will give a detailed introduction of various technologies in Android world and support them by developing application incorporating these technologies. Thus, the course will provide students with skills to program for Android devices. The aim of this course is to impart the knowledge of popular mobile application platform in order to enable students to write quality mobile applications.

Subject Topics

Topic	Content
1. Android Functionality	a) Basic concepts of Programming in Java b) Introduction to Android c) Its Platform, Android Studio
2. Android Design Schema	d) Android Building Blocks e) Anatomy of Android program f) Activity Life Cycle g) Activity Life Cycle hands-on
3. GUI	h) Fragments Life Cycle i) Creating GUI Programmatically j) Menus
6. Threads	k) Threads l) Async Task m) Splash Screen and Downloading
7. SQLite	n) Data Storage o) SQLite p) Backend and frontend connectivity

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understand the different mobile application platforms
2. Apply Java programming concepts to Android application development
3. Use software engineering cycles to create working application
4. Configure mobile applications to link and interact with local and web databases, multimedia and GPS systems
5. Design and develop user interfaces for the Android Platform

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment/Exercise (10% x 2)	20%
2. Tests and Quizzes 2.1 Quizzes (10% x 1)	10%
3. Project: Group / Individual 3.1 Proposal (5 x 1) 3.2 Proposed Design/Model (10 x 1) 3.3 Presentation (5 x 1)	20%
4. Final Examination	50%

TOTAL	100%
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Students must also refer to the Subject Assessment Details.

Assessment 1 Short Assignments(x2):

- a. Template design- Professional report/article template development validating student's practical approach in producing a standardize document. In this case, students must gather the user requirements, analyses them and the template design.
- b. Productivity tools professionally meeting minimum best practice standard's requirements. Each assignment contributes 10% towards the final grade for the subject.

Assessment 2 Quiz: A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Quiz contributes 10% towards the final grade for the subject.

Assessment 3 Project: Practical major tutorial/lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 20% towards the final grade for the subject.

Assessment 4 FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Mednieks, Z. et al. (2012). Programming Android: Java Programming for the New Generation of Mobile Devices. 2nd Edition. O'Reilly Media.

References and Readings

1. Deitel P. J. et al. (2012). Android for Programmers: An App-Driven Approach. Prentice Hall, 2012,
2. Unknown (2012). Android Application Development for Dummies.
3. Murphy, M. (2010). The Busy Coder's Guide to Android Development.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course :	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name :	Operating Systems
Subject Code:	IS 327
Duration:	13 teaching weeks
Contact Hours :	6 x hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode :	On campus
Subject Coordinator:	TBA

Synopsis

Students are introduced to modern operating systems, the most prominent system software, focusing on their purposes, principles and functionalities. The course will explore different components of operating systems and the services offered by them to increase the productivity, efficiency and convenience of users. Topics include processes and threads, process synchronisation, starvation and deadlocks, resource scheduling, physical and virtual memory organisation and their management, file systems, disk management and scheduling, and security issues. Real operating systems are used for case study where appropriate.

Subject Topics

Topic	Content
1. Introducing Operating System	What is an Operating System, Operating System Software, Brief History of Machine Hardware, Types of Operating Systems, Brief History of Operating System Development
2. Memory Management	Early Systems <ul style="list-style-type: none">• Single User Contiguous Scheme, Dynamic Partitions, Best-fit Versus First-fit allocation, Various types of deallocation techniques, Dynamic Relocatable Partitions• Virtual Memory• Paged memory allocation, demand paging, Page replacement policies & concepts, Segmented memory allocation, Virtual memory, Cached memory
3. Processor Management	<ul style="list-style-type: none">• Multi-Core Technologies, Job Scheduling Versus Processor Scheduling, Process Scheduler, Process Scheduling Policies & Algorithms, Interrupts
4. Process Management	<ul style="list-style-type: none">• Deadlocks, Various cases of deadlocks, Conditions for deadlocks, Strategies for handling deadlocks
5. Concurrent Processes	<ul style="list-style-type: none">• What is parallel processing, Evolution of multiprocessors, Introduction to multi-core processors, Typical multiprocessing configurations, Process Synchronization Software, Threads & Concurrent Programming
6. Device Management	<ul style="list-style-type: none">• Types of devices, Sequential Access Storage Media Direct Access Storage Devices, Magnetic Disk Drive Access Times, Components of the I/O subsystem, Device Communication, Management of I/O Requests, RAID
7. File Management	<ul style="list-style-type: none">• File Manager & interactions File Organization, Physical Storage Allocation, Access Methods, Levels in a file management system, Access control verification module, Data Compression
8. Network Management Concepts & Management of Network Functions on Operating Systems	<ul style="list-style-type: none">• Network topology & types, Software Design Issues, Transport Protocol Standards, DO/S & NOS Development
9. Security & Ethics on Operating Systems	<ul style="list-style-type: none">• Role of operating system in security, Security breaches & System Protection, Password management & Ethics
10. System Management	<ul style="list-style-type: none">• Evaluating an operating system, Measuring system performance, Patch management, System Monitoring & Accounting
11. Operating Systems in Practice	<ul style="list-style-type: none">• A closer look into operating systems & how they work in practice

- o Unix, MS-DOS Operating System, Windows Operating System, Linux, Android, IOS

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Demonstrate an understanding of the basic OS architectures, functions and roles
2. Cite the history and identify social impacts of different operating systems including mobile OS
3. Describe OS components for processes, devices, files and memory management
4. Research and report information on operating system types
5. Understand the basis of Unix shell scripting

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	15%
2. Assignment 2	15%
3. Quiz 1	10%
4. Final Examination	60%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

- Assessment 1** **Assignment 1:** An individual based take home assignment evaluating the understanding and application in topics 1 –4 as outlined above. The assignment will be given in week 4 and will comprise 15% of the total percentage points. Students will submit the assignment in week 7.
- Assessment 2** **Assignment 2:** This is a group-based take home assignment that will assess the understanding and application of topics 5- 8 as outlined above. The assignment will be given in week 8 and will comprise 15% of the total percentage points. Students will submit the assignment in week 10.
- Assessment 3** **Quiz 1:**
This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of topics 1-11. The test is meant to be comprehensive and would therefore only cover the important concepts and principles of mobile app development. The test will be given in week 12 and will make up another 10% of the total percentage points.
- Assessment 4** **FINAL EXAM:** This examination is an individual closed book exam examining the basic understanding and application of all topics highlighted above. The examination will make up 60% of the total assessments.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. McIver-McHoes, A. and Flynn, I., (2017). Understanding Operating Systems. 8th Edition. Cengage Learning.

References

1. Anderson, T. and Dahlin, M. (2014) Operating Systems: Principles and Practice. Recursive Books.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Electronic Commerce Technologies and Systems
Subject Code:	IS328
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode:	On campus
Prerequisites:	IS216/IS229
Subject Coordinator:	TBA

Synopsis

Topics may include fundamentals of e-commerce, business and revenue models of e-commerce, e-commerce infrastructure (software and hardware), e-commerce services (electronic retailing, and online payment systems etc.), protocols and standards for e-commerce, design, maintenance and administration of e-commerce sites, security and privacy of e-commerce sites, social, legal, environmental, political, and technical (SLEPT) issues in e-commerce

Subject Topics

Topic	Content
1. E-Commerce Applications	<ul style="list-style-type: none">• E-commerce applications.
2. E-Retailing (B2C) and B2B	<ul style="list-style-type: none">• Electronic retailing (e-tailing) and its characteristics.• Primary e-retailing business models.• B2B field.• Major types of B2B models.
3. Marketing & Advertising	<ul style="list-style-type: none">• Factors that influence consumer behaviour online.• Decision-making process of consumer purchasing online.• Issues of e-loyalty and e-trust in electronic commerce (EC).
4. Monitoring and Analysing User Activities on a Site	<ul style="list-style-type: none">• E-Commerce Site Monitoring and traffic analysis tools such as Google Analytics have affected online trade.• Negatively affected privacy concerns
5. Mobile Commerce	<ul style="list-style-type: none">• Use of mobile phones and other mobile devices contributed to growth in e-commerce.• Mobile Marketing Concepts & Techniques
6. E-Commerce Payment Systems	<ul style="list-style-type: none">• Shifts that are occurring with regard to online payments.• Players and processes involved in using credit cards online.• Different categories and potential uses of smart cards.• Stored-value cards and identify under what circumstances they are best used.
7. E-Commerce Security Issues - Laws and Ethics	<ul style="list-style-type: none">• Importance and scope of security of information systems for EC.• Major EC security threats, vulnerabilities, and technical attacks.• Major technologies and methods for securing EC access and communications.• Laws to protect disputes in e-commerce/digital transactions• Ethical issues concerning E-Commerce activities

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Undertake analytical review of various types of e-commerce and their application in diverse business contexts;
2. Investigate, analyses and propose or develop e-commerce solutions utilizing appropriate industry standards and technologies;
3. Understand the cognitive and technical approaches required to provide administrative support, problem solving and maintenance of an e-commerce site;
4. Discuss social, legal, environmental, political, and technical (SLEPT) issues in e-commerce in a global context;
5. Demonstrate communication skills to present a clear, coherent and independent exposition of knowledge and ideas in dealing with e-commerce clients.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Practical Lab Session	10%
2. Assignment/Project (10% x 2)	20%
3. Tests (10% x 2)	20%
4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

- Assessment 1** **Assessment 1:** Practical Lab Exercises(x2): Practical lab activities identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3 & 4 covered in the lectures. The lab sessions contribute 10% towards the final grade for the subject.
- Assessment 2** **Assignments(x2):** A survey & selection of 2 current e-commerce site setups in PNG by PNG companies and a practical evaluation of the sites using ecommerce concepts, taught in class & 2nd assessment task on technological developments especially in Internet Infrastructure and applications in PNG that contributed to rapid deployment of e-commerce applications and activities by businesses and individuals. The activities contribute 20% towards the final grade for the subject.
- Assessment 3** **Test(x2):** A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. Tests contribute 20% towards the final grade for the subject
- Assessment 4** **FINAL EXAM:** A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Schneider, G (2016). Electronic Commerce. 12th Edition, Course Technology

References/Readings

- a. Connolly, R and R, Hoar-Graviatt. (2018). Fundamentals of Web Development. 2nd Edition. Pearson Education, Inn

Relevant Unitech Policies

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FOURTH YEAR SUBJECT SPECIFICATIONS

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (BCIT) (NQF Level 7)
Subject Name:	Business Computing Experience
Subject Code:	IS411
Duration:	13 weeks (Semester 1, 65 working days minimum)
Contact hours:	Industry Engagement – Professional Work Experience
Credit Points:	60
Delivery Mode:	NA
Prerequisites:	Completion of Year 3 in BBIT.
Subject Coordinator:	TBA

Synopsis

This course introduces the student to business computing within a business environment. Each student is to be affiliated with an organization, and be engaged in any Information Technology or related business operational work experience. Appropriate personnel at the organization which the student is assigned to, is to decide on a variety of programming, systems analysis, software/hardware operational tasks and other appropriate tasks for the student. The work placement is to be sourced by the student and request for approval of placements to be made to the IS 411 Coordinator. A Certificate for business computing experience is expected to be produced by the employer.

Subject Topics

1. Review the university's Graduate Capability statements and the BBIT undergraduate Course and Subject Learning Outcomes;
2. Arrange and prepare for Professional Work Experience;
3. Undertake the required amount of Professional Work Experience;
4. Document activities, events and tasks from the Professional Work Experience;

Subject Learning Outcomes (SLOs)

On completion of this subject, students will be able to:

1. Apply programming skills, system analysis techniques, or appropriate systems/technology related skill/knowledge;
2. Demonstrate the ability to work effectively as part of a team in his/her organization;
3. Understand different business environments and the application of Information technology in individual business organization;
4. Undertake and complete assigned tasks in the workplace and maintain a professional level record of those tasks
5. Communicate workplace experiences and achievements through the required form mostly documentations and adhere to the subject requirements;
6. Critically reflect on the workplace achievements within the context of the course learning outcomes of their discipline

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
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1. Introductory Engagement Report	10%
2. Monthly progressive performances/activities report to be signed by the supervisor	30%
3. A final industry work experiences report	40%
4. Student/coordinator interaction before and during the industry engagements (including placement preparation) and the Subject coordinator's industry site visit	20%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

- Assessment 1 An Introductory Engagement Report (10%):** This 1-page report is to show the basic details about the employer, student's position and start date, at the work place which should be handed in at the end of the first week of the student's engagement.
- Assessment 2 Monthly progressive performance/activities report (30%):** This monthly performance or activity report covers the tasks and events that the student is engaged in within a given month. This report is to be verified and confirmed by the relevant supervisor in terms of comments and a signature. Expected number of reports will be 3. In the event that the student is unable to produce 3 reports due short-term work engagements or a late start, appropriate projects approved by the subject coordinator, can be submitted as well.
- Assessment 3 A Final Report (40%):** This non-technical report summarizes the entire work experiences, reflecting on what the student has learned about the industry workplace, how the ICT and other organization's employees act as well as what s/he has learned about his/her own preparedness to undertake the business and ICT related work. This is a formal report to be submitted as a soft copy at the end of the industrial training.
- Assessment 4 Student/Coordinator Interaction and Industry Site Visit (20%):** Students are expected to prepare well in the third year of study and before the final year of study begins in consultation with the subject coordinator. The coordinator will need necessary documents and reliable contact details for coordination purposes. Although students are required to source places of engagements, the coordinator may also make arrangements. Furthermore, constant dialogue between the student and coordinator is necessary before and during the industry experience placements due to the fact that the engagement is for the full semester of the program. The subject coordinator is to visit the student at the engagement site midway into the semester to observe the student's work environment and interact verbally with the student and the employer.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (BCIT) (NQF Level 7)
Subject Name:	Final Year Project
Subject Code:	IS412
Duration:	13 teaching weeks
Contact hours:	36 hours per week (inclusive of consultation times)
Credit Points:	60
Delivery Mode:	On campus
Prerequisites:	Completion of Year 3 (BCIT)
Subject Coordinator:	TBA

Synopsis

This course forms as an alternative to IS411 – Industrial Work Experience. The course aims to allow the students the opportunity to select a real business problem and using knowledge and skills acquired in the earlier learning, propose and implement an ICT solution to the business problem. Some of the common problems would be developing customised applications incorporating Databases, Programming skills, and web design skills to:

- Design and implement a Database Systems
- Implement an e-commerce solution,
- Design and implement a Point of Sales System Solutions,
- Design and Implement an ICT Security Systems Solution
- Design Network and implementation its solution,
- ICT and Security Policy Design and implementation solution
- Any other possible business problems and related possible ICT solutions.

Students must produce a working system and related implementing documentation and end user training modules.

- A research/survey or any other specific task can also be specified for the students to engage in provided guidelines and targets that students must achieve be specified clearly.

Subject Topics

Topic	Content
1. Systems Analysis & Design Review	<ul style="list-style-type: none">• A review of systems analysis and design concepts and applications• Project Identification based on Business/User Needs and Requirements
2. Systems Project	<ul style="list-style-type: none">• Practical work including Project Plans, systems proposal, systems prototype and final presentation

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Apply the systems analysis skills, database skills, programming skills and website design skills learned in years 1, 2 and 3 to practical use in a business environment;
2. Understand the role of the systems analyst and systems development in the Information Technology industry;
3. Develop a computerized solution to a business problem from the ground up;
4. Work with the non-technical staff within a business organization in order to properly define the business problem under investigation;
5. Deliver professional verbal and written presentations in a clear, concise and organized fashion.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Documentation	35%

1.1. Project Plan(s) (5%)	
1.2. Project Proposal (30%)	
2. System Prototype (Software)	40%
2.1. Software (35%)	
2.2. Relevant Documentation/instructions (5%)	
3. Presentation	15%
4. Others	10%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

Assessment 1 Project Documentations:

- a. **A project plan** which is expected to be reviewed midway during the project – 5%.
→ Students are to be guided into creating and revising a project plan.
- b. **A detailed project proposal** (which should include the findings from the analysis of the current system and design of the proposed system) – 30%.
→ Students are to clearly understand and define the issue, situation or problem with the current system and to design the intended system whilst working on a sample or prototype.

Assessment 2 Sample System:

- a. A system prototype or sample depicting major or selected components of the intended system as defined in the systems proposal. – 35%
- b. Related documentations for example a user manual and training documents – (5%)

Assessment 3 Presentation: A final presentation of the working system to staff in the IT section plus representative from the client organization who will adopt the final systems designed – 15%

Assessment 4 Others: 10% is set aside to be allocated to students according to the nature of project or situation and student efforts considering abnormal cases, availability of appropriate resources, use of appropriate or alternative tools, progressive reporting, etc.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook:

1. John W. Satzinger, Robert B. Jackson, Stephen D. Burd (2011) Systems Analysis and Design in a Changing World (6th Edition), Course Technology.

References and Readings

1. Raymond D. Frost, et al. (2012), Designing Business Information Systems: Apps, Websites, and More
2. Gary B. Shelly, Harry J. Rosenblatt (2012) Systems Analysis and Design, 9th Edition, Cengage Learning

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (BCIT) (NQF Level 7)
Subject Name:	Business Intelligence and Analytics
Subject Code:	IS421
Duration :	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode:	On campus
Prerequisites:	IS213
Subject Coordinator:	TBA

Synopsis

This course provides students with the comprehensive, up-to-date guide to today's revolutionary business intelligence (BI) and analytics principles, technologies, methodologies, and showcases how they can be used for improving business performance and business decision making. Students will explore solutions and learn design principles for building Business Intelligence and Analytics to support business decision making. Topics may include principles, technologies, methodologies of artificial intelligence (AI), BI and business analytics, BI model development, BI tools, data warehouse (DW), DW architecture and types, data modelling, data analytics, business analytics, big data management, big data technologies, data mining, data marts, machine learning, statistical modelling, optimization, online analytical processing, and many others.

Subject Topics

Topic	Content
1. Foundations and Technologies for Decision Making	Introduction to Artificial intelligence, Business Intelligence and analytics. All these are intelligence centred. Decision making. Conceptual foundations of decision making Herbert A Simon's four phases of decision making as a process Decision support systems (DSS)
2. Business Reporting, Visual Analytics, and Business Performance Management	Business Reporting, Visual Analytics, and Business Performance Management
3. Data warehousing and Data Mining	Data Warehousing (DW) Definitions and Concepts DW Process and Architectures Data Integration and the Extraction, Transformation, and Load (ETL) Processes, Data Warehouse Development Real-Time DW, Data Warehouse Administration, Security Issues, and Future Trends Data Mining (DM) Concepts and Applications, Data Mining Process, Data Mining Methods, DM Software Tools, DM Privacy Issues, Myths, and Blunders
4. Techniques for Predictive Modelling, Optimization and Multi-Criteria	Basic Concepts of Neural Networks, Developing Neural Network-Based Systems, the Black Box of ANN with Sensitivity Analysis, Support Vector Machines (SVM), A Process-Based Approach to the Use of SVM, k-Nearest Neighbor, Neighbors Method for Prediction. Analytical decision modeling, prescriptive models, decision making with a few alternatives, spreadsheets for analytical modelling, optimization & Linear programming. Sensitivity analysis, what-if analysis, and goal seeking. multi-criteria decision making

5. Modeling and Analysis: Heuristic Search Methods and Simulation	Simulation and heuristics, Search methods for decision support, Genetic algorithms, Applications of different types of simulation, System dynamics, agent-based modeling, Monte Carlo, and discrete event simulation, model management
6. Technologies of Automated Decision Systems	Automated rule-based decision systems Rule-based expert systems (ES) Engineering process for ES Applications of ES Tools and technologies for developing rule-based DSS Knowledge management (KM), Knowledge management system (KMS), Groupwork, communication, and collaboration, Groupware (group support systems—GSS) Web collaborative computing and group support of virtual meetings, Emerging technologies for collaboration
7. Big Data Analytics and Business Analytics	Big Data and analytics, Big Data analytics Hadoop, Spark, MapReduce, and NoSQL Big Data tools and services Stream analytics with applications Business Analytics, business process analytics, analytics platform

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Gain an understanding of the impact technological advances have on the nature and practices adopted within the BI and analytics environments, and know how to adapt to these changes;
2. Understand the BI and analytics and related concepts and techniques and be able to apply these concepts and techniques in various business contexts;
3. Address the need to propel information gathering and data organization, and exploit potential information and knowledge hidden in routinely collected data to improve decision making;
4. Develop solutions to real-world problems associated with the changing nature of IT infrastructure and increasing volumes of data, big data, through the use of applications and case studies, while gaining a deep appreciation of the underlying models and techniques of BI and analytics;
5. Develop knowledge of the theories and principles of BI, data analytics and business analytics;
6. Investigate the scope and application of various technologies within a BI and analytics system context.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1	15%
2. Assignment 2	25%
3. Midterm Test	10%
4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

Assessment 1 Case Study (15%): This individual assignment aims to improve the student's knowledge, skill, and critical thinking of developing academic report in general and case study in particular. A student must select a case from a perspective of Business Intelligence and Analytics to study. The case can be similar to any one of cases published in the textbook (see Google Classroom). However, the case must be a latest version available online in 2021. The case study should be based on the methodology used

in the textbook or the established methodology or as mentioned in the case study format. The case analysis must be based on at least quality references including journal papers, conference proceeding papers, books, and book chapters. The student is encouraged to analyze the algorithms and codes of a modern data analytics as a system. The case study report is based on the template of Springer LNAI or LNCS. The assignment will be assessed based on the marking guide. The final artifact of your assignment or report should include the following:

1. An abstract of your assignment consists of 120-160 words.
2. A report length is between 3800-4200 words.

All reports must use the American Psychological Association (APA) citation style.

Assessment 2 Team Assignment (25%): The team assignment aims to improve the students' knowledge, skill, and critical thinking of developing academic report, academic communication, and cooperation. Each team (two or three students ONLY, decided by the number of the class) will develop and submit an academic report of 4500-5000 words (weighting 15%) on one of the listed Statements/Topics in Assignment 2 Descriptions reflecting the state-of-art research and development of Business Intelligence and Analytics. The team will present their report (*.pptx) in the class (weighting 10%, in weeks 11 and 12). The report should demonstrate that the team has thoroughly researched the keywords and the key issues (one to three) of their selected statement/topic including any existing arguments based on a research approach.

The team leader will bargain with lecturer about his or her nominated 2-3 topics for his or her team assignment. The lecturer will decide which topic a team can use for the team assignment. The bargaining will be completed by the end of week 5. Your report should be a synthesis of ideas from a variety of sources expressed in your own words. Any behaviour of Plagiarism will be penalized accordingly.

All reports must use the American Psychological Association (APA) citation style. The presentation slides should be edited using PowerPoint.

Assessment 3 Midterm Test (10%): This test is an individual closed book test. It measures students' abilities and comprehension of the various concepts, principles, and techniques covered in the lecture topics (LNs 1-6) at various intervals. The questions in the midterm test normally consist of Multichoice Questions, Long Answer Questions, and Long Answer Questions. The test will be given in Week 7 and will comprise 10 % of the total percentage points.

Assessment 4 FINAL EXAM: This examination is an individual closed book exam for measuring the general comprehension of the overall concepts, principles, and techniques covered in the subject Business Intelligence and Analytics. The examination contributes 50% towards the final grade for the subject. The questions in the midterm test normally consist of Multichoice Questions, Long Answer Questions, and Long Answer Questions. Students must also refer to the Subject Assessment Descriptions for details for Assignments 1 and 2 as well as the sample midterm test and final examination paper for IS 421.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook:

1. Ramesh Sharda, et al, 2019, Business Intelligence, Analytics, And Data Science: A Managerial Perspective, 4/E, Person.
2. Ramesh Sharda, Dursun Delen, et al, 2019, Analytics, Data Science, & Artificial Intelligence: Systems for Decision Support. Person.

References and Readings

1. Ghavami, P. (2020). Big Data Analytics Methods: Analytics Techniques in Data Mining, Deep Learning and Natural Language Processing (2nd edition). Boston/Berlin: de Gruyter.
2. Minelli, Michael, Chambers, Michele, Dhiraj, Ambiga (2018) Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses, Wiley.

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (BCIT) (NQF Level 7)
Subject Name:	Management Information Systems
Subject Code:	IS422
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode:	On campus
Prerequisites:	IS112
Subject Coordinator:	TBA

Synopsis

This course provides students with an understanding of the management issues surrounding information and communication technology (ICT), ICT systems and information security, the knowledge of management functions and responsibilities necessary for ICT managers, Chief Information Officers (CIO), and digital security officers, and the knowledge to apply ICT management principles, technologies and methodologies in the organizational environment and information security. It provides frameworks and management principles that current or aspiring managers can employ to cope with the challenges inherent in management of rapidly advancing technologies and systems.

Topics may include ICT management and information systems, ICT infrastructure and support systems, managing IT and business process, managing new technologies, managing knowledge, acquisition of hardware, software and networks, data and network architecture, data visualization, big data, analytics and management, network management, social computing and social media, cloud computing and services, mobile computing and commerce, Information security, Enterprise information systems, digital security, crime, compliances and continuity.

Subject Topics

Topic	Content
1. Information systems Global e-business, and collaboration	The effects of IS on business and their relationship to globalization, an IS and its management, organization, and technology components, business processes and their relationship to IS, the role of systems serving the various levels of management, enterprise applications and organizational performance.
2. Ethical and social issues in Information systems	Ethical, social, and political issues raised by IS. Principles for ethical decisions, the challenges of contemporary IS technology and the Internet to the protection of individual privacy and intellectual property.
3. IT Infrastructure and emerging technologies	IT infrastructure and describe its components, the stages and technology drivers of IT infrastructure evolution, contemporary computer hardware and software platform trends. Database management systems (DBMS) and their capabilities and value, database design principles. Tools and technologies for accessing information from databases. Roles of information policy, data administration, and data quality assurance in the management of a firm's data resources
4. Telecommunications, The Internet, Wireless technology, and e-commerce	Principal components of telecommunications networks and key networking technologies, main telecommunications transmission media and types of networks, principal technologies and standards for wireless networking, communication, and Internet access, radio frequency identification (RFID) and wireless sensor networks e-commerce (EC), digital markets, and digital goods, EC business and revenue models, m-commerce with applications, building an EC Web site.
5. Securing Information Systems	IS vulnerable to destruction, error, and abuse, the business value of security and control, the components of an organizational framework for security and control, tools and technologies for safeguarding information resources.
6. Achieving operational excellence & Customer Intimacy	Enterprise systems and operational excellence, supply chain management systems, CRM systems and customer intimacy, the challenges posed by enterprise

	applications, enterprise applications used in platforms for new cross-functional services.
7. Managing Knowledge and Enhancing Decision Making	The role of knowledge management (KM) and KM programs in business, the types of systems used for enterprise-wide KM, the major types of knowledge work systems, the business benefits of using intelligent techniques for KM, the types of decisions and how the decision-making (DM), process works. IS and the activities of managers and management DM, business intelligence and business analytics support decision making, the role of IS in helping people working in a group make decisions more efficiently.

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understand the relationship between ICT and organizational management and current trends in IT and ICT management, and operational management requirements of a system and their inter-relationships;
2. Evaluate the philosophies and processes behind ICT resourcing;
3. Examine the organizational change which involves ICT;
4. Consider ethical issues in ICT management;
5. Develop resource management strategies and applying these in case studies;
6. Identify the processes and potential problems involved in IS development and ICT planning;
7. Plan, design, and write various ICT strategies to maintain ICT resources and infrastructure;
8. Develop and provide recommendations for ICT staff development.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment 1: An Academic Report	15%
2. Assignment 2: Mini- Thesis	15%
3. Midterm Test	20%
4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

Assessment 1 An Academic Report (15%): This individual assignment aims to improve the student's knowledge, skill, and critical thinking of developing an academic report. One of the listed topics provided in the Assignment 1 Descriptions for IS 422 assigned to a student randomly in the class. Then the student must search for at least two papers (one is journal paper; another is conference proceedings paper) related to the selected topics. Based on the reading of the selected papers, the student is asked to develop an academic report (that is, a research paper for publication, a case study, or a business report, a mini-thesis). The report is based on Springer standard and template for academic paper, that is, LNCS and LNAI, see it at Google classroom for IS 422. The final artefact of your assignment or report should include the following: An abstract of your assignment consists of 120-160 words AND A report length to be between 3800-4000 words. All reports must use the American Psychological Association (APA) citation style.

Assessment 2 Team assignment 15%: This team assignment aims to improve the students' knowledge, skill, and critical thinking of developing academic report, academic communication, and cooperation. Each team (two or three students ONLY, decided by the number of the class) will develop and submit an academic report or mini-thesis of 4500-5000 words on one of the listed Statements/Topics in Assignment 2 Descriptions reflecting the state-of-art research and development of Management Information Systems. The report should demonstrate that the team has thoroughly researched the keywords and the key issues (one to three) of their selected statement/topic including any existing arguments based on a research approach. Then the team leader will be responsible for his team assignment. The lecturer will decide which detailed topic a team can use for the team assignment. The bargaining will be completed by the end of week 5. Your report should be a synthesis of ideas from a variety of sources expressed in

your own words. Any behaviour of plagiarism will be penalized accordingly. All reports must use the American Psychological Association (APA) citation style.

Assessment 3 Midterm test (20%): The test is based closed book assessment, testing students' abilities and comprehension of the various concepts, principles, techniques, and systems covered in the lecture topics (LNs 1-6). The questions in the midterm test consists of Multichoice Questions, Long Answer Questions, and Long Answer Questions. The test will be given in week 7 and will comprise 20 % of the total percentage points.

Assessment 4 FINAL EXAM (50%): This examination is an individual closed book exam for measuring the general comprehension of the overall concepts, principles, techniques, and systems covered in the subject management information systems. The examination contributes 50% towards the final grade for the subject. The questions in the midterm test normally consist of Multichoice Questions, Long Answer Questions, and Long Answer Questions. Students must also refer to the Subject Assessment Descriptions for details for Assignments 1 and 2 as well as the sample midterm test and final examination paper for IS 422.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook:

5. Kenneth Laudon and Jane Laudon (2019). Management Information Systems- Managing Digital Firm. (16th edition) Pearson

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course :	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name :	Enterprise Systems
Subject Code:	IS424
Duration:	13 teaching weeks
Contact Hours :	6 hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode :	On campus
Prerequisites:	IS212 or AC223
Co-requisites:	Nil

Synopsis

The course provides students with knowledge of issues in accounting information systems (AIS) in general with specific focus on enterprise systems/business intelligence. Students learn skills in planning, managing and using accounting information systems (AIS) in general and Enterprise Systems (EI)/Business Intelligence (BI) solutions. Topics may include business functions, business strategy, business decision making, business process design, business process modelling, improvement and implementation, systems thinking, Enterprise architecture, ERP systems, functional areas, technology and architecture, workflow tools, Enterprise content management, SAP, CRM, SCM & KMS. An enterprise resource planning (ERP) system software such as SAP will be used to introduce students to the complexity of enterprise systems through tutorial workshops. A case study approach will be adopted which will focus on inherent issues surrounding management and deployment of enterprise systems, together with implementation issues influencing the impact of these systems on the organization. Students taking this subject will undertake a major group project.

Subject Topics

Themes	Topic Details
1. The Business Rationale and Need for Enterprise Systems in Companies	Introduction to Enterprise Systems <ul style="list-style-type: none">• What is an ERP and its components?• Evolution of ERPs• Limitations & Benefits of ERP• Implementation of ERPs
2. Components of An Enterprise System	Enterprise Systems Architecture <ul style="list-style-type: none">• ERP Modules,• ERP Architecture
3. Selection and Implementation of An Enterprise System	Software & Vendor Selection, Implementation Strategies
4. Challenges of Implementing a Successful Enterprise System: A Case Study	Operations & Post Implementation; ERP Case Study <ul style="list-style-type: none">• Supply Chain Management OR• Customer Relationship Management

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Discuss the impact of enterprise systems on accounting and related business functions
2. Examine the components, architecture and accounting functionality of enterprise resource planning systems (ERPS) in general.
3. Develop an appreciation of the managerial aspects related to the selection and implementation of ERPs.
4. Use ERPs for integrated accounting transaction processing, control, reporting and decision support.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Test 1	10%

2. Assignment 1	10%
3. Project	30%
4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

- Assessment 1** **Test 1:** An individual closed book test is to be given out to students. The test will assess students' understanding of enterprise systems and enterprise resource planning systems (ERPs) in general including why ERPs are useful to companies. The test will be given in week 3 in a closed room and will comprise 10 % of the total percentage points.
- Assessment 2** **Assignment 1:** An individual take home assignment is to be given out to students. The assignment will assist students to develop and appreciate the managerial aspects related to the selection and implementation of ERPs. The assignment will be handed out in week 5 and will comprise 10% of the total percentage points.
- Assessment 3** **Project:** A group-based project evaluating the understanding of practical knowledge that would help to address real world business problems associated with ERP usage and implementation. The project will be handed out in week 7 and will comprise 30% of the total percentage points.
- Assessment 4** **FINAL EXAM:** A final closed book examination examining the basic understanding, application and implementation of ERP systems will be administered. The examination will comprise 50 % of the total assessment.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Motiwalla L. & Thompson J. (2012). *Enterprise Systems for Management* (2nd Edition), Prentice Hall.
2. Deis P. (2014). *Enterprise System Implementation Best Practices: A Guide to Risk-Free Implementations*, Create Space Independent Publishing Platform.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Information System Security
Subject Code:	IS425
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15(2 hours lecture + 2 hours tutorial + 2 hours lab)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis

In this course students learn basics of information security, in both management aspect and technical aspect. Students understand of various types of security incidents and attacks, and learn methods to prevent, detect and react incidents and attacks. Students will also learn basics of application of cryptography which are one of the key technologies to implement security functions.

Subject Topics

Topic	Content
1. Defining Information Security 2. Basics of system security, information security and human aspect	What is Information Security? Examples of Information Security Incidents, what is Information Security Management? The three concepts of Information Security (Confidentiality, Integrity, Availability), Human Aspect of Information Security
3. Design and Principles	Security Design Principles, Security Mechanisms, Attacks to Network Systems
4. DB and Network Security	Database Security, Network Security, Attacks for Personal Computers and Smart phones, Counter measures
5. Security Risk assessment & Risk management	What is Risk Management process, Identifying Information Assets, Identifying Security Risk and evaluation, Information Security Management System (ISMS), Information Security Policy, Standards and Procedures
6. Cyber Crime and Ethics	Cyber Crime, Law and Ethics in Information Security, Privacy and Anonymity of Data

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Describe the importance of and requirements for information security focusing on confidentiality, integrity, and availability of information
2. Define various types of attacks, and how they are spread and executed, evaluate and implement methods available to protect information systems
3. Analyse secure network topologies utilizing physical security, firewalls, VPNs, and other protection features
4. Monitor and log activity on computers and networks using intrusion detection and prevention systems
5. Apply research skills to identify and correct potential security vulnerabilities
6. Apply research skills to perform the risk assessment and risk management for a secure information system
5. Use ERPs for integrated accounting transaction processing, control, reporting and decision support.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignment/ Exercises (10% x 2)	20%
2. Tests and Quizzes 2.1. Quizzes (10% x 1)	10%
3. Project: Group/ Individual 3.1. Proposal (5% x 1) 3.2. Proposed Design/Model (10% x 1)	20%

3.3. Questions & Answers (5% x 1)	
4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

Assessment 1 Short Assignments(x2):

- a) Template design- Professional report/article template development validating student's practical approach in producing a standardize document. In this case, students have to gather the user requirements, analyze them and the template design.
- b) Productivity tools professionally meeting minimum best practice standard's requirements. Each assignment contributes 10% towards the final grade for the subject.

Assessment 2 Quiz: A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Quiz contributes 10% towards the final grade for the subject.

Assessment 3 Project: Practical major tutorial/lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 20% towards the final grade for the subject.

Assessment 4 FINAL EXAM: concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Michael E. Whitman & Herbert J. Mattord (2012). Principles of Information Security, 4th ed; 2012 Course Technology, Cengage Learning.

References and Readings

1. William Stallings. Computer Security, Principles and Practice, 3rd edition.
2. [Electronic resources or links to be uploaded to the Learning Management System – Google Classroom](#)

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (BBIT) (NQF Level 7)
Subject Name:	Information Systems Development Project
Subject Code:	IS426
Duration:	13 teaching weeks
Contact hours:	6 hours per week
Credit Points:	15 (2 hrs lecture + 2 hrs tutorial + 2hrs lab)
Delivery Mode:	On campus
Prerequisites:	IS315
Subject Coordinator:	TBA

Synopsis

This project-based subject allows students to work in teams to analyse a major business, design and implement an information system for that business. Students are to provide necessary systems and project documentations, use any appropriate design and development tool including programming languages, web-based applications, available software packages, content management software and/or related tools. Review topics may include overview of the reliable information systems development, information systems project management and team leadership. Project topics or cases may be provided by the subject coordinator or by the students themselves. Students' own topics are to be approved by the subject coordinator based on given requirements.

Subject Topics

Topic	Content
1. Systems Analysis & Design Review	<ul style="list-style-type: none">• Project Identification based on Business/User Needs and Requirements• Design Specifications• Information Systems Project Management
2. Systems Project	Practical work including the student team and project confirmation, Project Plans, tasks allocation, systems proposal preparation, systems development tools and resources, the intended system, other related documentations and the final presentation.

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Develop and implement a computerized solution to a business problem or situation from the ground up;
2. Work effectively within a group during the development of a computer system;
3. Develop schedules and budgets and work within the constraints imposed by them.
4. Deliver professional verbal and written presentations in a clear, concise and organized fashion.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Systems Proposal (Document)	15%
2. Progressive Status Reports	20%
3. Information System 3.1. Software (30%) 3.2. User Manual (10%)	40%
4. Others (Practical Engagements) (5%) 4.1. Team Contract (5%)	15%

4.2. Individual Contribution (Contract vs Tasks/Outputs) (10%)	
TOTAL	100%

Students must also refer to the Subject Assessment Details:

Assessment 1 Systems Proposal (15%): A detailed systems proposal (which should include the findings from the analysis of the current system (5%), design of the proposed system (5%) and a detailed project plan (5%).

Assessment 2 Progress Status Reports (20%)

- a) Weekly Individual Progress Status Reports (Weeks 3 -12) – 5 %
- b) Appropriate team project meeting minutes (as per the schedule) – 5%
- c) A final project variation document (regarding the design, schedule or tasks) with justifications must be attached midway through the project - 5%
- d) Individual Lessons Learnt Report – 5%

Assessment 3 Information System (software and user manual) 40%:

- The software must include major components of the intended system as defined in the proposed systems design. – 30%
- The User Manual must contain necessary instructions and references – 10%

Assessment 4 Presentation: A final class presentation of the project – 10%

Assessment 5 Others: 10% is set aside for a valid team contract (with allocated tasks) and the individual efforts/contributions towards achieving the project completion status. The project schedule, progressive reports and team contract are to be used for verification purposes.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook:

1. Kenneth E. Kendall, Julie E. Kendall (2013) Systems Analysis and Design (9th Edition). Pearson.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>), PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Information Technology (NQF Level 7)
Subject Name:	Network and Cyber Security
Subject Code:	IS427
Duration :	13 teaching weeks
Contact hours:	6 hours per week (2 hours lecture + 2-hour tutorial + 2-hour Lab)
Credit Points:	15
Delivery Mode:	On campus
Prerequisites:	IS214
Subject Coordinator:	TBA

Synopsis

This course introduces students to Network and Internet/Cyber Security and explore the Security goals such as CIA (Confidentiality, Integrity and Availability) which are important to network communication. The course also introduces security incidents that threatened these security goals and technologies to mitigate these threats. Students will be introduced to basics of application of cryptography which is one of the key technologies to implement security functions in network communications. Finally, students learn how routers are use in networks to protect data in transit from one network to another in an Internet environment.

Subject Topics

Topic	Content
1. Review of the OSI Model and TCP/IP Protocol Suite	Seven-layer OSI Model, Internet Protocol Suite
2. Network Security Overview	Introduction, Security Goals
3. Attacks on Security Goals	Attacks on Confidentiality, Attacks on Integrity, Attacks on Availability
4. Technologies to Mitigate Those Security Threats (Firewalls and Intrusion Detection/Prevention Systems)	Firewalls, Packet Filtering, Types of Firewalls, Intrusion Detection/Prevention Systems (IDS/IPS), Network-based IDS/IPS, Host-based IDS/IPS
5. Public Key Cryptography, Infrastructure & Certificates	Introduction, The Digital Signature Concept, Public Key Cryptography Characteristics, Certificates and the Public Key Infrastructure, Public Key Cryptography Standards (PKCS), Attacks Which Target the Public Key Infrastructure and Certificates
6. Cybersecurity overview	Introduction, Security from a Global Perspective, Trends in the Types of Attacks and Malware, The Types of Malware, The Attacker's Motivation and Tactics, Network and Information Infrastructure Defence Overview
7. Cyber Threats and their Defence	DNS Protection, Router Security, Spam/Email Defence, measures, Phishing Defence measures, Web-based attacks, Database Defensive Methods, Botnets Attacks & Applicable Techniques
8. Security Policies to minimise security threats & incidents	Information Security Policy, Standards and Procedures

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Describe the importance of Data Communication Networks and requirements for the Data Communication Infrastructure to be secure in order to ensure Confidentiality, Integrity, and Availability of Data Communications & Information.
2. Define various Threats to Data Communications and tools that are employed to mitigate against those threats.
3. Analyse secure network topologies utilizing physical security, firewalls, VPNs, Public Key Cryptography and other protection features
4. Monitor and log activity on computers and networks using intrusion detection and prevention systems
5. Apply research skills to identify and correct potential security vulnerabilities
6. Apply research skills to perform the risk assessment and risk management for a secure Information and Data Communication system
5. Deliver professional verbal and written presentations in a clear, concise and organized fashion.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Assignments (x 2)	10%
2. Quizzes (x 4)	10%
3. Tests (x 2)	20%
4. Project	10%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

Assessment 1	Short Assignments(x2): a. Template design- Professional report/article template development validating student's practical approach in producing a standardize document. In this case, students have to gather the user requirements, analyse them and the template design. b. Productivity tools professionally meeting minimum best practice standard's requirements. Each assignment contributes 10% towards the final grade for the subject.
Assessment 2	Quiz: A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Quizzes contributes 10% towards the final grade for the subject.
Assessment 3	Test (x2): A theory based closed book assessment, testing students' abilities and comprehension of the various concepts covered in the lecture topics at various intervals. The Test contributes 20% towards the final grade for the subject.
Assessment 4	Project: Practical major tutorial/lab activity identifying students' general understanding of concepts, definitions and explanations and their technical ability relevant to topics 2, 3, 4 & 5 covered in the lectures. The major lab project contributes 10% towards the final grade for the subject.
Assessment 5	FINAL EXAM: A concept based closed book assessment, examining students' general comprehension of the overall concepts covered in the subject. The Examination contribute 50% towards the final grade for the subject.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14- week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Chwan-Hwa (John) Wu & J. David Irwin (2016). Computer Networks and Cyber Security, 1st Edition; CRC Press.

References and Readings

1. Behrouz A. Forouzan (undated). Data Communications & Networking, 5th edition.
2. Electronic resources or links to be uploaded to the Learning Management System – Google Classroom

Relevant Unitech Policies

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COURSE STRUCTURE

BACHELOR OF BUSINESS IN MANAGEMENT

First Year Code	First Semester Subject	Contact Hours	Credit
IS111	Introduction to Information and communication Technology	6	15
BM111	Introduction to Business Management	6	20
CD111	Professional Practice and Sustainable Development	6	15
MA114	Quantitative Methods I	6	21
		24	71

First Year Code	Second Semester Subject	Contact Hours	Credit
AE121	Principles of Economics	6	20
BM121	Business Law	6	20
AC121	Principles of Accounting	6	20
MA124	Quantitative Methods 2	6	21
		24	81

Second Year Code	First Semester Subject	Contact Hours	Credit
BM211	Principles of Marketing	6	20
BM212	Business Ethics & Corporate Governance	6	20
BM213	Entrepreneurship Development & Management	6	20
BM214	Consumer Behaviour	6	20
		24	80

Second Year Code	Second Semester Subject	Contact Hours	Credit
BM221	Human Resource Management	6	20
BM222	Tourism & Hospitality Management	6	20
BM223	Sales Management	6	20
AE222	Business Statistics	6	20
		24	80

Third Year Code	First Semester Subject	Contact Hours	Credit
BM311	Organizational Behaviour	6	20
BM312	Public Administration	6	20
BM313	Operations Management	6	20
Electives			
BM314	Business Research Methods	6	20
BM315	Service Marketing	6	20
		24	80

*** Please note that the Section Head will determine electives available to the students.

Third Year Code	Second Semester Subject	Contact Hours	Credit
BM321	Marketing Research	6	20
BM322	Marketing Communication	6	20
BM323	Industrial Relations	6	20
BM324	Purchasing & Supply Chain	6	20
		24	80

Fourth Year Code	First Semester Subject	Contact Hours	Credit
BM411	Marketing Management	6	20
BM412	Training & Development	6	20
BM413	Management Science	6	20
Electives			

BM414	International Business	6	20
BM415	Total Quality Management	6	20
		24	80

*** Please note that the Section Head will determine electives available to the students.

Fourth Year Code	Second Semester Subject	Contact Hours	Credit
BM421	International Marketing	6	20
BM422	Strategic Management	6	20
BM423	Research Project in Management	6	20
Elective			
BM424	Project Management	6	20
BM425	Change Management	6	20
		24	80

*** Please note that the Section Head will determine electives available to the students.

Graduate Statement

A SOB Graduate will have an in-depth knowledge in the field of Business and will demonstrate effective communication and collaboration skills, uphold the value of independence, innovation and entrepreneurship, display critical and professional judgment and a global and ethical understanding

Course Learning Outcomes (CLOs)

- CLO1**
 - Demonstrate an understanding and ability to apply the various business law and management theories, frameworks, and models within the foundational and core disciplines of business – Management, Economics, Human Resource Management, Organizational Behavior and Marketing.
- CLO2**
 - Demonstrate an understanding of the national, regional and global laws as they apply to business.
 - Demonstrate ability to integrate the knowledge and skills derived from the different functional areas of business law and management to solve real-world business problems.
 - Understand the impact of global issues, diverse world cultures and how they affect the adaptation of business practices to evolving global environment.
 - An ability to understand and apply statistical and methodical problem-solving techniques in context of business operations.
- CLO3**
 - Demonstrate ability to apply critical thinking and problem-solving skills when evaluating, analysing, interpreting, and applying business information in particular business context.
- CLO4**
 - Demonstrate competence in communication skills, research and use of information systems needed to prepare and present management reports.
 - Ability to demonstrate appropriate teamwork and leadership skills when working in diverse and dynamic work teams.
- CLO5**
 - Ability to recognize and identify ethical conflicts, apply ethical reasoning, and assess ethical norms and values appropriate for a business/management professional.

Graduate Attributes of PNG Unitech.

1. Lifelong learner
2. Critical thinker
3. Effective Communication
4. Cultural Modernist
5. Morally upright
6. Technologically Savvy

YEAR 1 SUBJECT SPECIFICATIONS

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Introduction to Business Management
Subject Code:	BM111
Duration:	13 teaching weeks
Contact Hours:	6 x hours per week
Credit Points:	20 (4 Lectures + 1Tutorials + 1 Project)
Delivery Mode:	On campus

Synopsis

This subject deals with understanding and making decisions for the effective management of organizations whether it be private or public organization. It also entails the students to understand the different types of environmental variables that will affect the operations of organizations and the approaches to take to managing these influences.

Subject Topics

Topic	Topic Details
1. Foundation of Management	<ul style="list-style-type: none">• Evolution of Management• External Environment of Organisations• corporate Social Responsibility
2. Management Functions	<ul style="list-style-type: none">• Operating A Business• Planning Function of Management• Organizing Function of Management
3. Human Resource Management	<ul style="list-style-type: none">• Human Resource Management Functions• Leadership• Motivation
4. Marketing	<ul style="list-style-type: none">• Creating and Pricing Products• Promoting and Distributing Products
5. Finance	<ul style="list-style-type: none">• Accounting and Financing• Effective Control

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Explain the Management Functions of Planning, Organizing, Directing and Controlling, and their applications to practical business and societal problems as they relate to PNG.
2. Explain the influence and relationship of the Management process to other behavioral sciences and the humanities in general.
3. Explain the concept of Management and why managers are needed.
4. Describe how organizations can benefit from acquiring personnel with Management education and explain why managers need to be continuously learning to maintain full effectiveness.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1	7%
2. Project 2	7%
3. Test 1	18%

4. Test 2	18%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details:

- Assessment 1** **Project 1:** An individual based project evaluating the understanding of students in introductory management concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise seven percent (7%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic management concepts and principles. The test will be given in week 6 and will comprise 18 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in business concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another eight percent (8%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of business concepts and principles. The test will be given in week 10 and will make up another 17 % of the total percentage points.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Luis, R. G, and D. Balkin (2012). Principles of Management, Arizona State University.
2. Rao, P.S. (2010). ‘Management- Theory and Practice’, Himalaya Publishing House, Mumbai

Relevant Unitech Policies

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SUBJECT SPECIFICATION

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Business Law
Subject Code:	BM121
Duration:	13 teaching weeks (Semester 2)
Contact Hours:	6 hours per week
Credit Points:	20 (4 Lectures + 1Tutorials + 1 Project)
Delivery Mode:	On campus

Synopsis

This subject deals with understanding and making decisions for the effective management of organizations whether it be private or public organization. It also entails acquaint students with the different ideas about the meaning of law, its roles and functions in the PNG and the world today, the reception of common law and its concepts and doctrines into the country and its effect in PNG upon both its statute law and its judge-made law; and to introduce the students to the underlying law of PNG and to the legal requirements for the development of a home-grown body of law tailored for the country’s needs and aspirations going forward into the 21st century.

Subject Topics

Topic	Topic Details
1.Nature of Law	<ul style="list-style-type: none"> • Conceptions on the meaning of law, • The origins, roles, sources and functions of law in PNG, • the making of legislation and common law in PNG, The Courts and the interpretation and construction of legislation. • Categories of law: Criminal law, the laws of tort contract, trusts and equity.
2.Courts and Dispute Settlement	<ul style="list-style-type: none"> • Criminal law and criminal proceedings and • Civil law and civil procedure and alternative dispute resolution of commercial disputes.
3.International Law	<ul style="list-style-type: none"> • Globalization; technology, resource laws and the environment, cyber law and copyright law in PNG. • International Law; its origin, content, concepts, ideas, institutions and organizations and its relationship to PNG municipal law, law and international commerce.
4.Partnership	<ul style="list-style-type: none"> • Background to and nature of partnership, • Relationship of partners amongst themselves, relationship of partners to third parties, liability of partners among themselves and to third parties, advantages and disadvantages of partnership as a business organization, conversion of partnerships to companies, dissolution of partnership, and limited partnership. • Agency: historical development and meaning of, creation of an Agency, capacity to act as an agent, capacity to act as Principal, liabilities of an agent, liabilities of a principal, effects of Agency, ratification of Agency, termination of Agency. Its difference to joint ventures. Creating and Pricing Products
5. Sale of Goods	<ul style="list-style-type: none"> • Meaning of, making the agreement, differences with other contracts dealing with goods, performance of the contract passing of property and risk, remedies of seller and buyer in event of breach. International sale of goods law. • Negotiable Instrument: bills of exchange, promissory notes and cheques. Nature of, rights and duties in and remedies of parties to these instruments. • Bill of Sale: Nature of and types of, historical development of, use of, rights and duties in, remedies for breach. Its relationship to hire purchase contracts. • Franchise: the nature of, its use, advantages, disadvantages, rights and liabilities of parties to, remedies for breach of such a contract. • Electronic Commerce; the law of electronic commerce, its nature, available security measures to protect uses of electronic commerce, jurisdiction over electronic commerce, right to privacy and computer crime.

Subject Learning Outcomes (SLOs)**Upon completion of this subject, students will be able to:**

1. Outline and differentiate the general principles of law in the laws of property torts contracts and trusts.
2. Identify commercial transactions and the specialized contracts particular to those transactions.
3. List and explain the legal nature and commercial requirements of the different types of contracts specially tailored by the business world for specific commercial purposes.
4. Apply these contracts to specific commercial situations in the work-place.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1	10%
2. Project 2	10%

3. Test 1	15%
4. Test 2	15%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Project 1:** An individual based project evaluating the understanding of students in business law concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise ten per cent (10%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic business law concepts and principles covered in the first three themes. The test will be given in week 6 and will comprise 15 % of the total percentage points.
- Assessment 3** **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in business law concepts and principles in the last two themes. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 9 of the semester. The assignment will compose another ten percent (10%) of the total percentage points.
- Assessment 4** **Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of business law concepts and principles in the last two themes. The test will be given in week 10 and will make up another 15 % of the total percentage points.
- Assessment 5** **FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will be assessing the understanding of business concepts and principles. The exam will be given in week 15 and will make up another 50 % of the total percentage points.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Phil Harris, P. (2007). *An Introduction to Law*, 7th ed., Cambridge University Press, New York.
2. Duxbury, R. (2008). *Contract Law*, Sweet & Maxwell, 1st ed., London.

References

1. Atkins, R (2007). *Business Law; Study Guide*, 6th ed., Prentice Hall PTR, New York, 2007.
2. Poole, J (2007). *Textbook on Contract Law*, 10th ed., Oxford University Press, New York.
3. Allison C. and P. Kohler (2005). *Property Law; Commentary and Materials* Cambridge University Press, NY.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

YEAR 2 SUBJECTS SPECIFICATIONS

Subject Specification

Course: Bachelor of Business in Management (NQF Level 7)
Subject Name: Principals of Marketing

Subject Code:	BM211
Duration:	13 teaching weeks (Semester 1)
Contact Hours:	6 hours per week
Credit Points:	20 (4 Lectures + 1Tutorials + 1 Project)
Delivery Mode:	On campus
Prerequisites:	BM111

Synopsis

In this course students will learn about the marketing process and examine the range of marketing decisions that an organisation must make in order to sell its products and services. You will also learn how to think like a marketer, discovering that the focus of marketing has always been on the consumer. You will begin to ask who the consumer of goods and services is, what the consumer needs and what the consumer wants. Marketing is an understanding of how to communicate with the consumer. The strategy a marketing firm chooses for a particular product is vital to the success of the product. The idea that great products sell by themselves is simply not true, by the end of this course, you will be familiar with the art and science of marketing a product.

Subject Topics

Topic	Topic Details
1. Definitions and Principals of Marketing	<ul style="list-style-type: none"> Marketing Overview & the Environment Strategic Marketing Planning Marketing Research
2. Segmenting, Targeting and Positioning	<ul style="list-style-type: none"> Markets and Buyer Behaviour Segmentations Targeting and Positions
3. Customers and Marketing Research	<ul style="list-style-type: none"> New Product Development Strategy, Products, Services and Experience
4. Life Cycles, Offers, Supply Chains and Pricing	<ul style="list-style-type: none"> Pricing and Distribution Strategy
5. Distribution and Promotion	<ul style="list-style-type: none"> Promotion and Marketing Communication
6. Launching a Marketing Campaign	<ul style="list-style-type: none"> International Marketing Creating Competitive Advantage

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Examine and discuss the key concepts of principals in marketing
2. Identify and explain the main factors involved in understanding the marketing place
3. Demonstrate an integrative understanding of the steps involved in marketing planning.
4. Analyze the components of marketing mix
5. Access, analyze, evaluate and synthesize information appropriate for marketing activities.
6. Work collaboratively to challenge and develop ideas to communicate outcomes in both oral and written context

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project	20%
2. Test 1	15%
3. Test 2	15%

4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Major Project 1:** An individual based project evaluating the understanding of students in Marketing management concepts and principles to be completed in week 10-12 and students to submit their completed project in weeks 10 to 12 of the semester as stipulated. The students are required to identify and select a company, either private or public, by conducting research through questionnaires and/or interviews demonstrating an understanding of the concepts and principles of Marketing. The assignment will comprise twenty percent (20%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of Marketing concepts and principles covered in the first to third themes (Topics 1-6). The test will be given after completion of topic 6 (week 7) and will comprise fifteen percent (15 %) of the total percentage points.
- Assessment 3** **Test 2:** The second test is an individual closed book test to be taken in class and the test will assess the understanding of the roles of rewarding, managing and evaluating Marketing covered in the third, fourth and fifth themes (Topics 7-10). The test will be given after the completion of topic 10 (week 12) and will comprise fifteen percent (15 %) of the total percentage points.
- Assessment 4** **FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will assess students' understanding of contemporary thinking and practices in Marketing. The exam will be given in week 15 and will make up another sixty percent (60 %) of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Kotler, P. & Armstrong, G. (2017), Principles of Marketing 17th Ed., Pearson.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Business Ethics and Corporate Governance
Subject Code:	BM212
Duration:	13 teaching weeks (Semester 1)
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hrs lectures + 1hr tutorials + 1 hr Project)
Delivery Mode:	On campus
Prerequisites:	BM111

Synopsis

This subject deals with understanding and making ethical business decisions for the effective management of organizations whether it be private or public organization. It also entails the students to understand the ethical theories and approaches to making decisions that can be deemed as appropriate for the continued operation of the organization.

Subject Topics

Topics	Topic Details
1. Introduction to ethics and business.	<ul style="list-style-type: none"> • Introduction to ethics and business. • Principal approaches to ethical thinking • Distributive Justice.
2. Ethical issues and considerations in business functions (accounting, marketing, etc).	<ul style="list-style-type: none"> • Ethical issues and considerations in business functions (accounting, marketing, etc) <p>Ethical Approaches to decision making</p>
3. Responsibility Professional	<ul style="list-style-type: none"> • Professional ethics • Whistle blowing • Rights and obligation of employees • Justice and fair practices
4. Ethics and Management.	<ul style="list-style-type: none"> • Ethics and Management • Corporate social responsibility • Ethics and Legal Compliance
5. Ethical conduct in International Business Environment.	<ul style="list-style-type: none"> • Ethical conduct in International Business Environment.

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Think and develop their critical thinking skills.
2. Analyze the different controversial issues in business and management
3. Examine the accepted practice of business in light of justice, right and human dignity.
4. Consider what moral imperatives and values should be at work in the conduct of business

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 40% + Examination 60%).

Assessment Task	Weighting (%)
1. Project	5%
2. Test 1	13%
3. Project 2	9%
4. Test 2	13%
5. Final Examination	60%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 **Assignment:** An individual based project evaluating the understanding of students in introductory management concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise five percent (5%) of the total percentage points.

Assessment 2 **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic management concepts and principles. The test will be given in week 6 and will comprise 13 % of the total percentage points.

Assessment 3 **Project 2:** The second project will also be an individual based project. It will be used for evaluating the understanding of students in business concepts and principles. The project is to be completed in a

- period of two weeks will be given in week 7 and students will submit the completed project in week 11 of the semester. The assignment will compose another nine percent (9%) of the total percentage points.
- Assessment 4 Test 2:** This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of business concepts and principles. The test will be given in week 10 and will make up another 13 % of the total percentage points.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will be assessing the understanding of business concepts and principles. The exam will be given in week 15 and will make up another 60 % of the total percentage points.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Ferrell et al. Business Ethics 11th Edition Houghton Mifflin Co 2016.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>). PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Entrepreneurship Development and Management
Subject Code:	BM213
Duration:	13 teaching weeks (Semester 1)
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hrs lectures + 1hr tutorials + 1 hr Project)
Delivery Mode:	On campus
Prerequisites:	BM111

Synopsis

This subject deals with understanding and making decisions for the effective entrepreneurship development. It also entails the students to understand the different types of entrepreneurships and how it will be developed for effective development of small and medium enterprises.

Subject Topics

Topics	Topic Details
1. Entrepreneurship Assessment	<ul style="list-style-type: none"> • Identifying Entrepreneurship • Entrepreneurship Assessment • Entrepreneurship Planning, • Entrepreneurship Financing,
2. Entrepreneurship Financial Analysis	<ul style="list-style-type: none"> • Entrepreneurship Financial Analysis • Organizing Social Entrepreneurship • Leveraging
3. Social Change through Entrepreneurship	<ul style="list-style-type: none"> • Social Change through Entrepreneurship • Investing in Social Entrepreneurship Development, • Technology Social Venture and Innovation,

4. Holistic Approach to People Development,	<ul style="list-style-type: none"> • Holistic Approach to People Development, • Managing the Growing Venture, • Managing Risks and Rewards,
5. Legal Protection of Intellectual Property and Marketing of Innovations	<ul style="list-style-type: none"> • Legal Protection of Intellectual Property and Marketing of Innovations

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Develop ability to understanding and developing entrepreneurial skills.
2. Demonstrate an ability to analyze the different entrepreneurial issues
3. Enhancing the ability to examine the accepted practices of entrepreneurship.
4. Demonstrate an ability to consider the implications of entrepreneurship on the economy

Assessment Tasks and Weightings - 40% Continuous & 60% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 40% + Examination 60%).

Assessment Task	Weighting (%)
1. Project 1	5%
2. Test 1	13%
3. Project 2	9%
4. Test 2	13%
5. Final Examination	60%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1	Assignment 1: An individual based project evaluating the understanding of students in introductory management concepts and principles to be completed in a period of two weeks will be given in week 3 and students to submit their completed project in week 5 of the semester. The assignment will comprise five percent (5%) of the total percentage points.
Assessment 2	Test 1: This is an individual closed book test to be taken in class and the test will assess the understanding and applications of basic management concepts and principles. The test will be given in week 6 and will comprise 13 % of the total percentage points.
Assessment 3	Project 2: The second project will also be an individual based project. It will be used for evaluating the understanding of students in business concepts and principles. The project is to be completed in a period of two weeks will be given in week 7 and students will submit the completed project in week 11 of the semester. The assignment will compose another nine percent (9%) of the total percentage points.
Assessment 4	Test 2: This will also be an individual closed book test. It is to be taken in class and the test will be assessing the understanding of business concepts and principles. The test will be given in week 10 and will make up another 13 % of the total percentage points.
Assessment 5	FINAL EXAM: This will be an individual closed book exam. It is to be taken in class and the exam will be assessing the understanding of business concepts and principles. The exam will be given in week 15 and will make up another 60 % of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Michael. J Roberts...et al. New Business Ventures and The Entrepreneur 6th Edition, McGraw Hill Irwin 2007.

2. Longenecker, Justin G., Small Business Management: An Entrepreneurial Emphasis, USA, South Western 15th edition, (2009)

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

SUBJECT SPECIFICATION

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Consumer Behaviour
Subject Code:	BM 214
Duration:	13 teaching weeks
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hrs lectures + 1hr tutorials + 1 hr Project)
Delivery Mode:	On campus
Prerequisites:	BM211

Synopsis

The course is designed for understanding the dynamics of consumer behaviour in business organisations. With the ever-changing business environments that we are living in, it is important to understand the different components of consumer behaviour and the approaches to managing the behaviours and maximising it to achieve the organisations goals in a more appropriate manner.

Subject Topics

Topic	Topic Details
1. Introduction	<ul style="list-style-type: none">• Consumer behaviour and marketing strategy• The nature of consumption• Internal and external influences
2. Part 1 Consumer Decision Process	<ul style="list-style-type: none">• Situational influences• Problem recognition• Information search• Evaluating and selecting alternatives
3. Part 2: Internal Influences	<ul style="list-style-type: none">• Perception• Learning and memory• Motivation, personality and emotion• Attitude and attitude change

4. Part 3: External Influences	<ul style="list-style-type: none"> • Demographics and lifestyles • Household structure and consumption behaviour • Group influence and communication • Social stratification
5. Part 4: Contemporary Topics in Consumer Behaviour	<ul style="list-style-type: none"> • Organisational buying behaviour • Consumers and society • Extended case studies

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Explain the contributions and applications of psychology, sociology and social anthropology in the study of buyer behavior for effective marketing.
2. Analyze the information gathering and decision-making processes involved in Purchasing.
3. Analyze stimuli external to consumers that influence how they think, feel, and act.
4. Discuss the marketing strategies by which marketing stimuli are created and placed in consumer environments in order to influence consumer impressions, cognition and behavior.

Assessment Tasks and Weightings - 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project	20%
2. Test 1	15%
3. Test 2	15%
4. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Major Project 1:** An individual based project evaluating the understanding of students in concepts and principles of consumer behaviour to be handed out in week 3 and students to submit their completed project in either week 10 to 12 of the semester as stipulated. The students are required to identify and select a company, either public or private, then conducting research through questionnaires and/or interviews demonstrating an understanding of the concepts and principles relevant in behaviours and attitudes of consumers. The assignment will comprise twenty percent (20%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding and applications of behaviours, market segments and motivation of consumer covered in the first to third themes (Topics 1-6). The test will be given after completion of topic 6 (week 7) and will comprise fifteen percent (15 %) of the total percentage points.
- Assessment 3** **Test 2:** The second test is an individual closed book test to be taken in class and the test will assess the understanding of the roles of motivation, decision making and cultural influences covered in the third, fourth and fifth themes (Topics 7-10). The test will be given after the completion of topic 10 (week 12) and will comprise fifteen percent (15 %) of the total percentage points.
- Assessment 4** **FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will assess students' understanding of behaviours, motivation, decisiveness and external stimuli that shape and pattern behaviour covered in the first to fifth themes. The exam will be given in week 15 and will make up another fifty percent (50 %) of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Hawkins, NQ (2002) Consumer Behaviour 3rd Edition. Implication for Marketing Strategy. McGraw –Hill Australia Pty Ltd

References

1. Assael H., Consumer Behaviour and Marketing Action: PWS-Kent (1992).
2. Assael, H., Pope, N., Brennan, L., & Voges, K., Consumer Behavior, First Asia-Pacific Edition, John Wiley (2007).
3. Evans, M., Jamal, A., Foxall, G., Consumer Behaviour, John Wiley (2006).

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Human Resource Management
Subject Code:	BM221
Duration:	13 teaching weeks (Semester 2)
Contact Hours:	6 x hours per week
Credit Points:	20 (4 hrs lectures + 1hr tutorials + 1 hr Project)
Delivery Mode:	On campus
Prerequisites:	BM111

Synopsis

The subject is designed to provide students with an understanding of the contemporary thinking and practice in the area of human resources management with specific reference to profit making organizations. The subject will discuss both conventional and contemporary HR practices and issues, and align with organizational performance and building a competitive advantage. On completion of this subject the students will be able to deal effectively and manage issues and solve problems relating to the use of human resources and employer – employee relationship.

Subject Topics

Topic	Topic Details
1. Introducing HRM	<ul style="list-style-type: none">• What is Human Resource Management• Strategic Human Resource Management• Human Resources Planning
2. Determining, Attracting and Selecting Human Resources	<ul style="list-style-type: none">• Job Analysis, Job Design• Recruiting Human Resources• Employee Selection
3. Developing Human Resources	<ul style="list-style-type: none">• Appraising and Managing Performance• Training and Development
4. Rewarding Human Resources	<ul style="list-style-type: none">• Employee Motivation, Compensation and Benefits
5. Managing Human Resources	<ul style="list-style-type: none">• Managing effective HRM, Workplace relations• Employee Health and Safety

6. Evaluating Human Resources Management	• Assessing Human Resources Management Effectiveness
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Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Ability to understand the strategic role of HRM in an organization such as contemporary thinking and practice of HRM.
2. Ability to resolve problems related to determining, attracting, maintaining, and retaining human resources management in an organization.
3. Ability to successfully accomplish/deal the employee-employer relationships while reaching the goal of the organization.
4. Ability to analysis HRM related issues through discussions, and applications of concepts, principles and techniques of HRM in an organisation

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (Continuous 50% + Examination 50%).

Assessment Task	Weighting (%)
1. Project 1 (Major)	20%
2. Test 1	15%
3. Test 2	15%
4. Final Examination	50 %
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project 1:** An individual based project on evaluating the understanding of students on the contemporary human resources management practices and thinking to be issued in Week 3 and submit complete project in Week Twelve (12) of the semester as stipulated. The students are required identify and select a company, either private or public, and then conduct research through questionnaires and/or interviews by evaluating the concepts and principles of HRM used by the chosen company. The assignment will comprise twenty percent (20%) of the total percentage points.
- Assessment 2 Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding of strategic roles of HRM and determining, attracting and selecting HR covered in the first and second themes (Topics 1-6). The test will be given after completion of topic 6 (Week 7) and will comprise fifteen percent (15 %) of the total percentage points.
- Assessment 3 Test 2:** The second test is an individual closed book test to be taken in class and the test will assess the understanding and application of developing HR, appropriate rewarding of HR and effectively managing HR covered in the third, fourth and fifth themes (Topics 7-10). The test will be given in Week 11 after the completion of topic 10 and will comprise fifteen percent (15 %) of the total percentage points.
- Assessment 4 FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will assess students' understanding of contemporary thinking and practices in HRM, determining, attracting and selecting HR, develop, reward and manage HR and evaluate HRM effectiveness. The exam will be given in Week 15 and will make up another fifty percent (50 %) of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Raymond J. Stones. (2013). Human Resources Management [8th edition], John Wiley & Sons Ltd, Australia.
2. Raymond J. Stones. (2002). Human Resources Management [4th edition], John Wiley & Sons Ltd, Australia.

References

1. Nankervis et al. (2017). Human Resource Management: Strategy and Practice [9th edition]. Cengage Learning Pty Ltd. Australia.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>). PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>

YEAR 3 SUBJECT SPECIFICATIONS

Subject Specification

Course(s)	Bachelor of Business in Management (NQF Level 7)
Subject Name	Tourism & Hospitality Management
Subject Code	BM222
Duration	13 teaching weeks (Semester 2)
Contact Hours	6 x hours per week
Credit Points	20(4 Lectures + 1Tutorials + 1 Project)
Delivery Mode	On campus
Prerequisites	BM111 & BM213

Synopsis

This subject is designed to provide students with an understanding of the world's largest industry by categorically examining the travelling publics and tourism promoters, providers and suppliers of services, destinations and the external environment's impact on tourism. The subject will address the role of tourism and hospitality management in the current business environment, its evolution and growth and application of appropriate marketing strategies, and promoting vibrant and sustainable industry in the PNG context as well as internationally. The subject will discuss both conventional and contemporary tourism and hospitality systems and approaches, and align with building a competitive and vibrant tourism industry. On completion of this subject the students will be able to appreciate the role to the industry in the local context and the significance of cultivating a sustainable industry.

Subject Topics

Topic	Topic Details
1. The Tourism Management and System	<ul style="list-style-type: none">● Introduction to Tourism Management● The Tourism System
2. The Evolution of Tourism	<ul style="list-style-type: none">● The Evolution of Tourism The● Growth of Tourism
3. The Tourism Product, Markets and Marketing activities	<ul style="list-style-type: none">● The Product● The Tourism Market● Tourism Marketing
4. The Environmental Factors influencing Tourism	<ul style="list-style-type: none">● The Economic Impacts of Tourism● Socio-Cultural and Environmental Impacts of Tourism
5. The Tourism Destination	<ul style="list-style-type: none">● The Destinations● Destination Development
6. The Sustainability and Future of Tourism	<ul style="list-style-type: none">● Sustainable Tourism● Tourism Research

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understand the role of Tourism and Hospitality in the current business environment
2. Critically analyse the evolution and growth of tourism and its destinations in PNG context
3. Analyse and apply the appropriate marketing strategies for the industry
4. Understand the role of tourism and hospitality service suppliers
5. Understand the different approaches to promoting the sustainable tourism industry in PNG
6. Understand the research needs of the tourism industry in PNG

Assessment Tasks and Weightings – 40% Continuous & 60% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (*Continuous 40% + Examination 60%*).

Assessment task	Weighting (%)
1. Project 1	15%
2. Test 1	10%
3. Test 2	10%
4. Quiz/Short assignment	5%
5. Final Examination	60%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1** **Major Project 1:** An individual project based on evaluating the understanding of students in Tourism and Hospitality management concepts and principles. This project will be a semester-long project that will be completed towards the end of the semester (due in week 10 to 12) where students are required to select a tourism company in the industry and actual going out and conducting research by form of questionnaires and interviews. After which students should submit their completed project in week 10 - 12 of the semester as stipulated. The assignment will comprise fifteen percent (15%) of the total percentage points.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class and the test will assess the understanding of the nature and applications of tourism and hospitality management concepts and principles covered in the five themes (Topics 1-5). The test will be given after completion of topic 5 (Week 6) and will comprise ten percent (10 %) of the total percentage points.
- Assessment 3** **Test 2:** The second test is an individual closed book test to be taken in class and the test will assess the understanding of the products, the markets, marketing strategies and the impacts of economic and socio-cultural environments which will be covered in the sixth to ninth themes (Topics 6-10). The test will be given after the completion of Topics 6-10 (Week 11) and will comprise ten percent (10 %) of the total percentage points.
- Assessment 4** **Quiz/Short Assignment:** This will also be an individual project that will evaluate the understanding of the students about the topics covered and appreciate the impacts of sustainable tourism and conducting empirical research on tourism. It is to be undertaken purposely to develop an understanding and appreciation of the sustainability of the sector which will be covered in the tenth and eleventh themes. The quiz/assignment, depending on the discretion of the lecturer, will be given after Week 10 which will make up five percent (5 %) of the total percentage points.
- Assessment 5** **FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will assess the understanding of students about tourism and hospitality management concepts and principles, the evolution and growth of the industry, the vital products, the new and existing markets, the external environmental impacts, the suitable destination and overall sustainability of the industry. The exam will be given in Week 15 and will make up another sixty percent (60 %) of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Weaver, D & Lawton, L (2014). Tourism Management, 5th Edition, John Wiley Education, Australia,
2. Cook, R, Hsu, C & Marqua, J (2014). Tourism: *The Business of Hospitality and Travel*, 5th edition, Prentice Hall

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course(s)	Bachelor of Business in Management (NQF Level 7)
Subject Name	Selling & Sales Management
Subject Code	BM 223
Duration	13 Teaching Weeks (Semester 2)
Contact Hours	6 x hours per week
Credit Points	20 (4 hrs lectures + 1hr tutorials + 1 Project)
Delivery Mode	On campus
Prerequisites	BM211

Synopsis

The course Selling and Sales Management is designed for second year business studies. It is tailored for enhancing participants to understand the basic principles of becoming a salesperson and its significance in today's ever-changing business environments. In essence, today's salespeople are to be well-educated, well-trained professionals who will work to build and maintain long-term customer relations. It further explores the development of a salesperson and sales techniques. Integrating themes explored throughout the course are: *the art of selling, preparing for the sale, the selling process, and managing yourself and your career.*

Subject Topics

Topic	Topic Details
1. The life & career of a sales person, ethical & legal issues in selling, why people buy, communication skills for relationship building	<ul style="list-style-type: none"> • Careers in Sales. The concept of salesmanship • Ethical and legal issues in selling • Planning a Sales Call
2. Prospecting, planning a sales call & the selling process	<ul style="list-style-type: none"> • Prospecting and Lead Generation • Making a Sales Call. • Why people buy? Buyer behavior & Communication Skills for relationship Building
3. Elements of great presentation	<ul style="list-style-type: none"> • Elements of a Great sales presentation • Responding to objections & closing a sales • After the sale: Service to build partnership
4. Responding to objections & closing a sales, After the sale: Service to build partnership	<ul style="list-style-type: none"> • Time and territory Management. Keys to Success • After the sale; service to build partnership • Building long term partnership
5. Time and territory Management: Keys to Success	<ul style="list-style-type: none"> • Assessing Sales force productivity. • Recruitment and selection of sales people & Orientation and training • Team building

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Ability to recognise the critical role played by company's sales people
2. Ability to understand the effectiveness of personal selling and its relation to marketing communication
3. Ability to understand and apply the activities involved in the personal selling process
4. Ability to analyse and decide on the factors that affect the design and implementation of the personnel selling process
5. Ability to efficiently and effectively supervise and manage the sales force

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (*Continuous 40% + Examination 60%*).

Assessment Tasks	Weighting (%)
1. Project 1	15%
2. Test 1	10%
3. Test 2	10%
4. Quiz/Short Assignment	5%
5. Final Examination	60%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project 1:** This assignment is designed for students to work in pairs where they will put together a sales strategy or plan. Students are asked to choose a company in town that specialises in selling goods and services. They will be able to demonstrate the ability to develop a sales plan based on a particular product. They will liaise with business organisations of their choice to undertake the task. It carries a total of fifteen percent (15%) and is due at the end of week 12 of the semester.
- Assessment 2 Test 1:** This is an individual closed book test to be taken in class and will be given in week six (6) and composition of the test questions will come from topics covered within the six weeks. This test will be given to find out about the students understanding in salesmanship and its importance, personal selling and the different types of selling techniques that can be utilized when making a sales call. Also, they will further explore the significance of ethics and legal issues in a selling business environment. It carries a total of ten percent (10%) of the total assessment marks
- Assessment 3 – Test 2:** The second test is an individual closed book test to be taken in class and the test will be in week 10 worth ten percent (10%) of the total marks and it will be designed for students to further explore in the areas of Making a Sales Call, Elements of a Great sales presentation, Prospecting and Lead Generation, responding to objections & closing a sale.
- Assessment 4 Quiz/Short Assignment:** A short assignment or quiz, depending on the lecturer's discretion, will be given at the end of the semester to test students' knowledge and understanding in the overall concepts in sales management. A total of five percent (5%) will be awarded to the overall assessment.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam. It is to be taken in class and the exam will be designed to explore students' knowledge and skills in overall dynamics of selling and how one can become an effective sales person if one decides to choose it as a career the exam will be given in Week 15 and will make up another sixty percent (60 %) of the total percentage points.

Student Workload

The total workload for the subject for the 'average' student is a nominal 60 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbooks

1. Shorholm, G., and L, Kaufman. (1995) '**Principles of Selling**', Prentice-Hall,
2. Hopkins, T, et al. (2008) '**Wiley Pathways Selling**', 1st Edition. Wiley,

Relevant Unitech Policies

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YEAR 3 SUBJECT SPECIFICATION

Subject Specification

Course(s)	Bachelor of Business in Management (NQF Level 7)
Subject Name	Organizational Behaviour
Subject Code	BM311
Duration	13 teaching weeks
Contact Hours	6 hours per week
Credit Points	20 (4 hrs lectures + 1hr tutorials + 1 hr Project)
Delivery Mode	On campus
Prerequisites	BM111
Subject Coordinator:	TBA

Synopsis

This subject deals with the basic skills required for understanding behavioural situations in organizations and Principles as well as Practices that affect human behaviour in organizations. It also predicts the influence of individuals' and groups' psychology in the forms and functions of organizations and applies interpersonal skills necessary to operate as an effective manager.

Subject Topics

Topics	Topic Details
1. Introduction to Organizational Behaviour	<ul style="list-style-type: none"> Define and value to OB of systematic study. Major behavioral science disciplines that contribute to OB. Challenges and opportunities managers have in applying OB concepts.
2. Attitudes and Job satisfaction	<ul style="list-style-type: none"> Components of an attitude and the relationship between attitudes and behavior. Job satisfaction and. main causes of job satisfaction
3. Personality and values	<ul style="list-style-type: none"> Personality determined and theories Personality traits
4. Perception and individual decision making	<ul style="list-style-type: none"> Define <i>perception</i>, and explain the factors that influence it. Identify the shortcuts individuals use in making judgments about others. Link between perception and decision making and common decision biases or errors.
5. Motivation concepts	<ul style="list-style-type: none"> Key elements of motivation Identify early theories of motivation and evaluate their applicability today
6. Foundations of group behaviour	<ul style="list-style-type: none"> Define group and the five stages of group development. Demonstrate how norms and status exert influence on an individual's behaviour
7. Understanding work teams	<ul style="list-style-type: none"> Compare and contrast four types of teams. Identify the characteristics of effective teams.
8. Communication	<ul style="list-style-type: none"> communication process Contrast oral, written, and nonverbal communication. Common barriers to effective communication

9. Leadership	<ul style="list-style-type: none"> Define the leadership and contrast leadership and management. Trait theories of leadership. Charismatic leadership and transformational leadership. Challenges to the effectiveness of leadership.
10. Power and politics	<ul style="list-style-type: none"> Define <i>power</i> and contrast leadership and power and the five bases of power. Identify the causes and consequences of political behavior. Apply impression management techniques.
11. Conflicts and Negotiation	<ul style="list-style-type: none"> Define <i>conflict</i> and differentiate between the traditional, integrationist and managed-conflict views of conflict. Outline the conflict process. Contrast distributive and integrative bargaining. Apply the five steps of the negotiation process.
12. Organisational culture	<ul style="list-style-type: none"> Define <i>organizational culture</i> and its common characteristics. Factors that create and sustain an organization's culture. Demonstrate how an ethical culture can be created.

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

- Outline the scope of organizational behavior as a field of study
- Familiar with various aspects of individual behavior like attitudes, job satisfaction, personality and values and perception and human motivation in organizational behavior
- Understand group dynamics and strategies for the development of effective teams and understand the key behavioral elements required for effective teams
- Analyze the communications and leadership, power and politics and conflict and negotiation in the organization.
- Recognize organizational culture and learn strategies for developing and changing organizational culture.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weightings (%)
1. Major Research Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short assignment/Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Major Research Project: This is an

- Assessment 1** individual based project worth 15% of the total marks that will be given in week 2 and completed and submitted in week 10. It is designed to evaluate the understanding of students in understanding behavioural situations in organizations and Principles as well as Practices that affect human behaviour in organizations and predict the influence of individuals' and groups' psychology in the forms and functions of organizations.
- Assessment 2** **Test 1:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 6 after completion of themes 1-5. The test will assess the understanding and applications of organizational behavioural concepts and principles covered so far.
- Assessment 3** **Test 2:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 10 after completion of themes 6-9. It is designed to assess the understanding and applications of organisational behaviour concepts and principles covered so far.
- Assessment 4** **Short Assignment/Quiz:** This assessment will be under the discretion of the lecturer and worth 5% of the total marks that will be given in week 10 after completion of test 2. It is aimed at assessing the conceptual understanding and practical application of the subject by the students in an organisational setting.
- Assessment 5** **FINAL EXAM:** This will be an individual closed book exam worth 50% of total marks that will be conducted in week 15 and will cover all topics discussed throughout the semester. It is designed to assess the understanding of business concepts and principles and the theoretical and practical application of organisational behaviour principles in an organisation.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Steven, R, P and J, A, Timothy. (2018). Organizational Behavior. 14th Edition. Prentice Hall.

Relevant Unitech Policies

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Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Public Administration
Subject Code:	BM312
Duration:	13 Teaching Weeks (Semester 1)
Contact Hours:	6 hours per week
Credit Points:	20 (4 hrs lect + 1hr tut + 1 hr seminar)
Delivery Mode:	On campus
Prerequisites:	BM213, BM221
Subject Coordinator:	TBA

Synopsis

The course Public Administration is a third-year business management course which is tailored for enhancing participants to understand the basic principles of Public Administration and its significance in today's ever-changing business environments. In essence, today's administrators and managers are to be well-educated, well-trained professionals who will work to build and maintain long-term customer and people relations. It further explores the development of an administrative professional in administrative techniques. Integrating themes explored throughout the course will enhance participants to understand the application of administrative techniques in public and private institutions of Papua New Guinea.

Subject Topics

Topics	Topic Details
1. Three schools of administrative theory; classical, neo-classical and administrative theory	<ul style="list-style-type: none">• Introduction and definition of Public Administration• Differences in administration, organisation and management
2. The main features and principles of public service systems	<ul style="list-style-type: none">• The three schools of management• The functions of management
3. The management of Public Organisations	<ul style="list-style-type: none">• The management of Public organisations• The PNG scenario
4. Consumer Communication Management	<ul style="list-style-type: none">• Consumer Communication Management
5. Leadership and Public Organisations	<ul style="list-style-type: none">• The management of Public Organisations• What is the difference between a leader and a manager?
6. Public Corporations	<ul style="list-style-type: none">• What are public corporations?• What are the differences between public departments and public corporations?
7. Planning, budgeting, legislative, administrative relations and administrative reforms	<ul style="list-style-type: none">• The importance of Budgeting and planning• What are the significances of administrative reforms and legislative relations?

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Identify and explore concepts and methodologies of public administration;
2. Understand the roles and responsibilities of an administrative position in service or profit oriented organizations;
3. Explain the significant inputs that an administrative professional can have on an organization;
4. Explore and understand the overall art of Public Administration in regards to service delivery & productivity;

5. Understand the unique challenges and problems that exists within the public institutions;
6. Explore and develop concepts that could become the catalyst of change in public administration.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Project 1	15%
2. Test 1	15%
3. Test 2	15%
4. Short assignment/Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Research Project:** This major project is designed for students to work in pair worth 15% of the total marks that is will be given in week 2 and will be due in week 12. Students will be required to frame together a document paper to review the strategic plan of a government department. They will identify the challenges, issues within the departments and find way forward and provide solutions for effective implementation of the strategic plans so that goods and services reach our people in PNG.
- Assessment 2 Test 1:** This will be an individual closed book test taken in class worth 15% of the total marks that will be given to the students in week 5 after completion of topics 1-4. It is designed to find out about the students understanding of Public Administration in the areas of schools of administrative theory and management theories. They will further explore the dynamics of public administration in relation to managing public institutions in PNG.
- Assessment 3 Test 2:** This will also be an individual close book test taken in class worth 15% of the total marks that will be given in week 10 after completion of topics 5-9. It is designed for students to further explore the concepts in Consumer Communication Management, Leadership of Public Organizations, and the Public Personnel Management Practice in the PNG Public administration.
- Assessment 4 Short Assignment/Quiz:** This will be an individual project under the discretion of the lecturer worth 15% of the total marks that will be given week 10 after test 2. It is designed to evaluate the understanding of students about the topics covered and develop an appreciation of the application of public administration concepts and practices in PNG.
- Assessment 5 FINAL EXAM:** This is an individual closed book examination to be taken in class worth 50% of the overall marks that will be conducted in week 15 and questions will come from all the topics covered in the semester. It is designed to explore students' knowledge and skills in overall dynamics of public administration and how one can become an effective administrator if one decides to choose a career in public service.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Stillman, R, L, B. (2008). Public Administration. Concepts and Cases. Houghton Mifflin. 8th Edition

Relevant Unitech Policies

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Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Operations Management
Subject Code:	BM313
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20 (4 hrs lectures + 1hr tutorials + 1 hr Project)
Delivery Mode:	On campus
Prerequisites:	BA256
Subject Coordinator:	TBA

Synopsis

This course is designed and tailored for students to study and understand the fundamental concepts of operations in business and manufacturing settings. Effective operation management in today's competitive global business environment is critical for any firm or organisation to remain competitive and survive. A fundamental understanding of operational management principles and concepts and their applications to industry will help students develop professional skills that will equip them for challenges in this ever-changing global market place. In addition, they should apply concepts from production and operation management theories in a practical sense in order to develop and manage effective operations of firms to achieve a sustainable competitive advantage.

Subject Topics

Topics	Topic Details
1. The role of Operations Management in an organization.	<ul style="list-style-type: none"> Define an operations strategy and its linkage to corporate strategy and market analysis. Describe the process view of operations in terms of inputs, processes, outputs, information flows, suppliers, and customers. Identify the latest trends in operations management, and understand how given these trends, firms can address the challenges facing operations and supply chain managers in a firm.
2. Competitiveness, Operations Strategy and Productivity	<ul style="list-style-type: none"> Developing core competencies. Productivity improvement -The challenge is to increase the value of output relative to the cost of input.
3. Location Decisions for operations & production	<ul style="list-style-type: none"> Importance of Location decisions as they will affect process and operation of each department. Identify and critically analysis dominant factors in Manufacturing
4. Project Management	<ul style="list-style-type: none"> Appreciate that Projects are unique, one-time operations designed to accomplish a specific set of objectives in a limited time frame. Understanding key decisions in project management.
5. Forecasting	<ul style="list-style-type: none"> Understanding the importance of forecasting in operation and production management. Critical understanding of various forecasting methods to help operations in production.
6. Inventory Management	<ul style="list-style-type: none"> Defining the term Inventory and list the major reasons for holding inventories; and list the main requirements for effective inventory management. Understanding economic order quantity models (EOQ) and confidently applying them in production & operation management.
7. Supply chain management in Operation and Production.	<ul style="list-style-type: none"> Critical understanding and application of supply chain management strategies will add value to any organization or firm. Understanding and measuring supply chain performance.

8. Just-in-Time/Lean manufacturing in production and operation settings.	<ul style="list-style-type: none"> Building a lean organization through effective management of inventory thus avoiding waste, increase efficiency and reducing holding costs. Understanding and applying JIT strategies to improve operations management thus adding value to the firm.
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Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Appreciate the importance of effective Operations Management in manufacturing and production setting.
2. Understand and analysis the concepts of operations management in the competitive global context.
3. Develop competitive operation strategy to improve productivity in manufacturing and production settings.
4. Define and understand project management as a one-off management activity and applying concepts and strategies to achieve desired goals and outcome.
5. Critical understanding of various forecasting methods to help operations & production. Define and understand the main concept requirements for effective inventory management.
6. Critical understanding and application of supply chain management strategies in operation and manufacturing that will add value to any organization or firm.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Research Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment/Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Research Project:** This major research assignment is an individual work worth 15% of the total marks that will be given in the week 2 and will be due in week 12. It is designed for students to visit a local manufacturing industry that applies effective operation and production management strategies that are sound and internationally accepted. Students will then be required to complete a report on the visit and critically analyse the company's application of operation & production strategies. In this case the company chosen is Lae Biscuit Company. They supply the local market with various Biscuits to the local Market. This visit will critically enhance their operations & production theoretical concepts and strategies to that of an actual business organisation.
- Assessment 2 Test 1:** This will be a closed book test taken in class worth 15 % of the total marks that will be given to the students in week 5 after completion of topics 1-4. It is designed to find out about the students understanding of Production and operation management, operational strategies and location decisions in operations.
- Assessment 3 Test 2:** This will also be a closed book test taken in class worth 15% of the total marks that will be given in week 10 after completion of topics 5-9. It is designed for students to further develop and understand Operation & production management covering the following topics: inventory management, project management, supply chain management and forecasting.
- Assessment 4 Short Assignment/Quiz:** This short assignment/quiz under the discretion of the lecturer will be an individual project worth 5% of the total marks that will be given in week 10 after test 2. It is designed to evaluate the understanding of students about topics studied and concepts and sound practices of operations management.
- Assessment 5 FINAL EXAM:** This will be a closed book individual exam taken in class worth 50% of the overall marks that will be conducted in week 15 of the semester. The questions will come from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in Operation & Production Management.

Student Workload

The total workload for the subject for the ‘average’ student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Krajewski, J., Ritzman, B. and Malhotra, M. (2013) Operations Management: Processes and Supply Chains, 10th Edition. Prentice Hall.

Relevant Unitech Policies

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Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Business Research Methods
Subject Code:	BM314
Duration:	13 teaching weeks (Semester 1)
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect+ 1hr + 1hr Project)
Delivery Mode:	On campus
Prerequisites:	BM111 & AE222
Subject Coordinator:	TBA

Synopsis

It is important to know how to go about making the right decisions by being knowledgeable about the various steps involved in finding solutions to problematic issues of interest to the organization and/or its stakeholders. This subject is designed to introduce students to the research methods that can be used in most businesses and management research. It will help students to understand the research process, develop a good research proposal and also learn how to carry out their research projects appropriately. On completion of this subject the students will be able to appreciate the role of research in finding solutions to a problem after a thorough study and analysis of the situational factors.

Subject Topics

Topic	Topic Details
1. Nature, Approaches and Process of Business Research	<ul style="list-style-type: none"> • Introduction to business and management research, approaches and process. • The scientific approach and alternative approaches to investigation
2. Designing the Business Research	<ul style="list-style-type: none"> • Formulating and clarifying the research topic • Critically reviewing the literature • Theoretical Framework and Hypothesis Development • Research Design • Experimental designs
3. Collecting Accurate Data	<ul style="list-style-type: none"> • Measurement • Sampling • Qualitative Data & Collection Methods • Quantitative Data & Collection Methods
4. Preparing Analysing and Reporting Results	<ul style="list-style-type: none"> • Data Analysis • Research Report

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understand the nature of Business and Management Research;
2. Prepare a good business research proposal;
3. Apply the research process in a study to address a business problem;
4. Determine the appropriate sampling, measurements, data collection, and data analysis techniques and methods to apply in a business research project;
5. Write and present a business research report.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment task	Weighting (%)
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1. Project/Major Assignment 1	15%
2. Test 1	15%
3. Test 2	15%
4. Quiz/Short assignment/presentation	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project/Assignment 1:** This is an individual assignment worth 15% of the total marks that will be given in week 2 and due in week 9 with oral presentations in week 11. It is designed to assess the understanding of students on an important aspect of research – writing a research good business/management research proposal. This project will have two parts to it where the student will submit a written research proposal and also do an oral presentation of their work.
- Assessment 2 Test 1:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 5 after completion of topics 1-4. It is designed to assess the understanding of the nature and approaches and process of business research.
- Assessment 3 Test 2:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in in week 9 after completion of topics 5-8. It is designed to assess the understanding of designing the business research.
- Assessment 4 Presentation/ Quiz/Short Assignment:** This will also be an individual assessment item which will be an extension of assessment 1 – Major Assignment worth 5% of the total marks that will be conducted in week 11 where the students will be required to do an oral power point presentation of their written research proposal. This is to evaluate the individual student's understanding and confidence of the research process, the significant of their intended research and the methodology to be used to collect data and analyse. This exercise will also assess the student's ability to do a short presentation of a detailed research proposal.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam taken in class worth 60% of the total marks that will be conducted in week 15. It is to be taken in class and the exam will assess the understanding of students on business research. The exam will cover most of the topics covered in the lectures during the semester.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Uma S and R Bougie. (2016). Research Methods for Business: A Skill-Building Approach, 7th Edition, Wiley. UK
2. Saunders M; Lewis P; and A Thornhill. (2012). Research Methods for Business Students. 6th Edition. Pearson UK

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Service Marketing
Subject Code:	BM315
Duration:	13 Teaching Weeks (Semester 1)
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1 hr tut + 1 hr Project)
Delivery Mode:	On campus
Prerequisites:	BM211

Synopsis

This course service marketing for 3rd year business management students is designed and tailored for students to study and understand the fundamental concepts of service marketing in today's global business environment. As more firms are specializing in the service Industry apart from the traditional production operations, the need for students to understand, differentiate and market service products is crucial. A fundamental understanding of service products, their characteristics and unique marketing strategies will help students develop professional skills that will equip them for challenges in this ever-changing global market place. In addition, they should apply concepts from the services marketing theory in a practical sense in order to develop and manage effective marketing programs within service firms to achieve a sustainable competitive advantage.

Subject Topics

Topics	Topic Details
1. Service Marketing	<ul style="list-style-type: none"> History and development of service industry Marketing challenges in the service industry globally.
2. Customer behavior in service encounter	<ul style="list-style-type: none"> Framework for Developing Effective Service Marketing Strategies How Differences among Services Affect Customer Behavior
3. Service1-11 product development & Service failure and recovery	<ul style="list-style-type: none"> Service components Service product strategies Blue printing and service mapping. Guidelines for the effective service recovery system.
4. Building customer relationship & Quality management	<ul style="list-style-type: none"> The Goal of Relationship Marketing Relationship Value of Customers Defining service Quality Dimensions in service quality
5. Pricing and revenue management & Positioning Services in Competitive Markets	<ul style="list-style-type: none"> What Makes Service Pricing Strategy Different and Difficult? Three Main Approaches to Pricing Basic Focus Strategies for Services
6. Managing People for Service Advantage	<ul style="list-style-type: none"> Service Personnel: Source of Customer Loyalty and Competitive Advantage. Human Resources Management— How to Get It Right?

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Appreciate the emergence of Service industry in global Business.
2. Understand the concepts of service marketing
3. Understand and develop framework for Effective Service Marketing Strategies.
4. Understanding service failure and recovery including blue printing and service mapping.
5. Quality management and Defining service Quality.
6. Understand the concepts of Pricing and revenue management in service products.

7. Understanding and Managing People for Service Advantage

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Project 1	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment/Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Research Project:** This will be a major individual assignment worth 15% of the total marks that will be given in week 2 and completed and submitted by week 12. It is designed for students to identify one local or Foreign Service firm and compile a report on the challenges and opportunities of service marketing. The paper should include topics covered including pricing structure of the firm and competitive marketing strategies employed to remain competitive.
- Assessment 2 Test 1:** This is a closed book test to be taken in class worth 15 % of the total marks that will be given to the students in week 5 after completion of topics 1-4. This test will be given to find out about the students understanding in the emergence of Service industry, service product development and customer behaviour in service encounter.
- Assessment 3 Test 2:** The second test is also a closed book test to be taken in class worth 15% of the total marks that will be given in week 10 after completion of topics 5-9. It is designed for students to further develop and understanding of service quality management, service failure and recovery and building customer relationship.
- Assessment 4 Short Assignment/Quiz:** This will be a short individual assignment/quiz under the discretion of the lecturer worth 5% of the total marks that will be given in week 10 after test 2. It will be designed to assess the understanding of students on the theories and concepts of service marketing and implications to organisations.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam to be done in class worth 50% of the overall marks that will be conducted in week 15 and will cover questions from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in Service Marketing.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14 week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Zeithaml, V., Bitner, M. and Gremler, D. (2006). Services Marketing – Integrated Customer Focus across the Firm. 6th Edition. McGraw-Hill Irwin. New York.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Marketing Research
Subject Code:	BM321
Duration:	13 teaching weeks (Semester 2)
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1 hr tut + 1 hr Project)
Delivery Mode:	On campus
Prerequisites:	BM211,BM314

Synopsis:

Technology and the growth of global business are increasing the complexity of marketing research. This course is designed to provide an overview of marketing research and will be introduced to the real-world applications of marketing research in organisations and the industry. The fundamental concepts and stages of marketing research provided within an overall structural framework, including: how to integrate the research process, carry out marketing research in a scientific manner, read and analyse marketing research reports will be covered. On completion of this subject the students will be able to appreciate the role and value of marketing research information for effective marketing decision making in organizations.

Subject Topics

Topics	Topic Details
1 Introduction and Role and Value Marketing Research	<ul style="list-style-type: none"> Introduction to Marketing Research
2. Designing the Marketing Research	<ul style="list-style-type: none"> Defining the Marketing Research Problem and Developing an Approach Secondary Data and Literature Review Exploratory and Observation Designs Descriptive and Causal Research Designs
3. Collecting Marketing Data	<ul style="list-style-type: none"> Sampling Theory and Methods Measurement and Scaling Designing the Questionnaire and data collection
4. Preparing &Analyzing Data	<ul style="list-style-type: none"> Qualitative Data Analysis Data Preparation for Quantitative Analysis Data Analysis for Quantitative Research
5. Communicating the Results	<ul style="list-style-type: none"> Marketing Research Report

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Develop problem analysis skills, and ability to translate a marketing problem into a feasible research question.
2. Design and conduct marketing research.

Apply some data analysis techniques most frequently used in marketing research.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment task	Weighting (%)
1. Project/Major Assignment 1	15%
2. Test 1	15%
3. Test 2	15%
4. Quiz/Short assignment/presentation	5%
5. Final Exams	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1	Major Project/Assignment 1: This will be a group assignment worth 15% of the total marks that will be given week 2 of the semester. It is designed to assess the students' understanding of the concepts, principles and process of marketing research and applying them by carrying out a marketing research project on a topic of interest to them. This project will have two parts to it, where the student will conduct marketing research and submit a written marketing research report and also do an oral presentation of their main findings. The research will take 10 weeks (week 2-11) and the oral presentation will be done in week 12. The written marketing research report will be worth 10% and the oral presentation, 5%, totalling 15% of the continuous assessment.
Assessment 2	Test 1: This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 5 after completion of topics 1-4. It is designed to assess the understanding of the overview, role and value of marketing research.
Assessment 3	Test 2: This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 8 after completion of topics 5-7. The test will assess the understanding of formulating the marketing research project.
Assessment 4	Presentation/ Quiz/Short Assignment: This group assessment item will be an extension of Assessment 1 – Major Project worth 5% that will be given in week 12 where the students will be required to do an oral power point presentation of their marketing research project. This is to evaluate the students understanding of their respective research topic design and execute marketing research and confidently present their main findings. This exercise will also assess the student's ability to do a short presentation of a detailed marketing research report.
Assessment 5	FINAL EXAM: This will be an individual closed book exam taken in class worth 50% of total marks that will be conducted in week 15 of the semester. It is designed to be taken in class and the exam will assess the understanding of students of marketing research theories and application. The exam will cover most of the topics covered in the lectures during the semester.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Hair J. F. et al. (2017). Essentials of Marketing Research. 3rd Edition. McGraw Hill. New York.
2. Burns A. C., et al. (2017). Marketing Research. 8th Edition. Pearson Education.
3. Malhotra, N. K. (2015). Essentials of Marketing Research: A Hands-On Orientation. Pearson Education. Essex, England.
4. Aaker, A, D. et al, (2013). Marketing Research. 11th Edition. USA

Readings

1. Marketing Research Related materials (Books, Journals etc.)

Relevant Unitech Policies

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Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Marketing Communications
Subject Code:	BM322
Duration:	13 teaching weeks (Semester 2)
Contact Hours:	6 hours per week
Credit Points:	20 (4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Prerequisites:	BM211

Synopsis

This course integrates the theoretical and more importantly the managerial issues concerning the operation of the marketing communications. Marketers have wisely moved away from the view of advertising as the predominant form of persuasive marketing communications to a perspective that embraces all forms of marketing communications-advertising, sales promotion, trade promotions, publicity and public relations, personal selling and sponsorship marketing. These communications tools must be evaluated from a strategic perspective and brought together in a consistent, complementary way to achieve product's features and benefits, interest in trying or purchasing the product, and/or perceptions that reflect the brand's desired positioning. This course investigates marketing communications and the strategies that will lead to the achievement of promotional objectives.

Subject Topics

Topics	Topic Details
1. Integrated marketing communications	<ul style="list-style-type: none">• Role communication plays in marketing programs• Review the nature of the communication process• Applying the communications model to marketing issues
2. Brand and Corporate image management	<ul style="list-style-type: none">• Importance of corporation's image• Develop tactics and plans to build an effective corporate image• Importance of effective brand and product positioning, and utilise the strategies
3. Buyer behaviour	<ul style="list-style-type: none">• Understand the consumer buying decision-making process• Learn how attitudes and values influence buyer behaviours
4. Promotion Opportunity analysis	<ul style="list-style-type: none">• Prepare a complete promotions opportunity analysis• Identify the characteristics of various consumer market segments
5. Advertising management	<ul style="list-style-type: none">• Steps of an effective advertising management process• Steps of effective advertising campaign management process
6. Advertising design: Theoretical Framework and types of appeals	<ul style="list-style-type: none">• Advertisement theories• The roles attitudes and values play in developing advertising messages• Identify times when each major advertising appeals will be effective and when it will not
7. Advertisement design: Message strategies and Executional frameworks	<ul style="list-style-type: none">• Message strategies (cognitive, affective and conative)• Roles message strategies play in designing effective leverage points and executional frameworks• Apply every executional framework

8. Advertising and media selection	<ul style="list-style-type: none"> • Process of creating a media strategy and understand the roles media planners and media buyers play in an advertising program • Study and incorporate the advantages of various media in developing and advertising campaign • Recognise the value of effective mix of media in an advertising campaign
9. Trade promotion	<ul style="list-style-type: none"> • Recognise the important relationship between trade programs and the other parts of the promotions mix • Understand the difference between trade promotions and consumer promotions • Utilise the promotions tools to build strong ties with members of the marketing channel • Know when and how to use each trade promotions tools
10. Consumer promotions	<ul style="list-style-type: none"> • Be aware of the goals, advantages and disadvantages for trade promotions programs that can be used in marketing a company or product. • Tie consumer promotions with trade promotions and other element of the promotions mix and then match them to the overall IMC program. • Understand the limitations, which are present when consumer promotions programs are developed for international customers.
11. Personal selling: Marketing and Consumer Relationship Management	<ul style="list-style-type: none"> • Understand the role of personal selling • Examine the role of personal selling in buying decision-making processes
12. Data base marketing	<ul style="list-style-type: none"> • Database marketing • Building a data warehouse • Database coding and analysis • Data mining • Database driven marketing communications
13. IMC for Small & Entrepreneurial ventures	<ul style="list-style-type: none"> • Design and develop IMC for SMEs

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Analyse and design the communications model to build an effective corporate image and brand;
2. Analyse the consumer buying decision-making process along with complete promotion opportunity analysis to develop effective messages strategy;
3. Analyse and design the effective strategy for advertising campaign management programs and executional frameworks;
4. Analyse and develop the strategy for media selection, trade promotions and consumer promotions;
5. Analyse and evaluate the relevant factors to design appropriate strategies for personal selling, database marketing and public relations;
6. Analyse and develop the communication strategy for small business owners

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Project 1	15%
2. Test 1	15%
3. Test 2	15%

4. Short assignment/Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Research Project:** This is a major individual based project worth 15% of the total marks that will be given in week 2 and completed and submitted by week 12. It is designed to enhance the research skills and evaluate the understanding of students in theoretical and managerial issues concerning the operation of the marketing communications of an organisation.
- Assessment 2 Test 1:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 6 after completion of topics 1-5. It is designed to assess the understanding and applications of building effective communications models and consumer buying decision process.
- Assessment 3 Test 2:** This will also be an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 10 after completion of topics 6-9. It is aimed at assessing the understanding of designing effective advertising strategy, media selection and trade and consumer promotions.
- Assessment 4 Short Assignment/Quiz:** This will be an individual/group assessment under the discretion of the lecturer worth 5% that will be given in week 10 after test 2. It is designed to assess the understanding of students on the concepts, theories and practices in marketing and managing effective communication aimed at improving organisational efficiency.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam worth 50% of the overall marks that will be conducted in week 15. It is to be taken in class and the exam is designed to assess the understanding of marketing communications concepts and principles.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14 week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbooks

1. Clow, K. E and D. E, Baack. (2016). Integrated Advertising, Promotion, and Marketing Communications. 7th Edition. Prentice – Hall.
2. Atkins, R (2007). Business Law; Study Guide, 6th Ed., Prentice Hall PTR, New York
3. Poole, J (2007). *Textbook on Contract Law*, 10th ed Oxford University Press, New York.
4. Allison C. and P. Kohler (2005). Property Law; Commentary and Material. Cambridge University Press, NY.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Industrial Relations
Subject Code:	BM323
Duration:	13 teaching weeks (Semester 2)
Contact Hours:	6 hours per week
Credit Points:	20 (4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Prerequisites:	BM111, BM221

Synopsis

Industrial Relations are the relationships between employees and employers within the organizational settings. From this perspective Industrial Relations covers all aspects of the employment relationship, including human resource management, employee relations and union management relations. In order for organizations to progress and remain successful they need to have healthy Industrial Relations and the key is how these relations can be managed by managers to have a cohesive and successful environment.

Subject Topics

Topics	Topic Details
1. Introduction, Approaches to Industrial Relations	<ul style="list-style-type: none"> • Introduction to Industrial Relations • Approaches to Industrial Relations
2. Context, concepts and values in industrial relations	<ul style="list-style-type: none"> • Context of Industrial Relations • Concepts and values in industrial relations
3. Trade Unions	<ul style="list-style-type: none"> • Trade Union development and function • Trade Union organization and structure • Trade unions at the workplace
4. Management of Industrial Relations, the role of government and Collective bargaining	<ul style="list-style-type: none"> • Management (industrial Relations) • The Government • Collective Bargaining
5. Employee involvement and industrial actions	<ul style="list-style-type: none"> • Employee involvement and Participation • Industrial action, conciliation and arbitration
6. Working arrangements and grievance handling	<ul style="list-style-type: none"> • Negotiations, Pay and working arrangements • Grievance, discipline and redundancy procedures

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Acquire a solid theoretical, practical and ethical perspective on many aspects of industrial relations.
2. Critically analyse theories, models and paradigms in the field.
3. Understand the key participants, institutions, relationships and processes in employment relations so that you acquire an enhanced ability to influence industrial relations outcomes in an informed manner
4. Develop research, writing and speaking skills necessary for work, life and further postgraduate study.
5. Strengthen key competencies in group participation, oral and written communication and persuasion, critical thinking, problem-solving, information processing and planning.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Task	Weighting (%)
1. Major Project	15 %
2. Test 1	15 %
3. Test 2	15 %
4. Quiz/Short Assignment	5 %
5. Final Examination	50 %
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Research Project:** This will be a group-based project worth 15% of the total marks that will be given in week 2 and completed and submitted in week 10. It is designed to evaluate the understanding of students in Industrial Relations concepts and principles. The students are required to identify and select a Union, either from private sector or public enterprise, by conducting research through questionnaires and/or interviews demonstrating an understanding of the concepts and principles of Industrial Relations and Labour Unions.
- Assessment 2 Test 1:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 7 after completion of topics 1-6. It is designed to assess the understanding and applications of Industrial Relations concepts and principles.
- Assessment 3 Test 2:** The second test is an individual closed book test to be taken in class worth 15% of the total marks that will be taken in week 11 after the completion of topic 10. The test is designed to assess the understanding of the roles of Unions in Organisations covered in the third, fourth and fifth themes (Topics 7-10).
- Assessment 4 Quiz/Short Assignment:** This will also be an individual/group project worth 5% of the total marks that will be given in week 11 after test 2. It is designed to evaluate the understanding of the students about the principals of Industrial Relations. It is to be undertaken purposely to evaluate and assess the effectiveness of conflict solving in organisation.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam taken in class worth 50% of the total marks that will be conducted in week 15. It is designed to assess students' understanding of contemporary thinking and practices in Industrial Relations and understand of the concept of industrial relations.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Michael Salmon (2000). Industrial Relations Theory and Practice. 4th Edition. Prentice Hall.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Purchasing & Supply Chain Management
Subject Code:	BM324
Duration:	13 teaching weeks (Semester 2)
Contact Hours:	6 hours per week
Credit Points:	20 (4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Prerequisites	BM313

Synopsis

This subject deals with the basic skills required for understanding the strategic role of Supply Chain Management in Organizations. The key strategic Drivers of Supply Chain Management that affect performances towards achieving Strategic Goals of an organization. Furthermore, this course aims to offer analytical methodologies for supply Chain analysis. The major objective of this course is for students to learn and understand the strategic importance of good supply design, planning, and operations of any firm. Students will understand the competitive edge a firm had when a good supply chain management is functional in an organizational. Alternatively, weakness in a supply chain performance can only weaken a firm's competitive edge.

Subject Topics

Topics	Topic Details
1. Understanding the supply chain and Achieving strategic fit and scope	<ul style="list-style-type: none"> What is supply chain management The objectives of supply chain management Importance of supply chain management Competitive and supply chain management Achieving strategic fit
2. Supply chain drivers and Metrics	<ul style="list-style-type: none"> Drivers of supply chain management Frame work for structuring Drivers
3. Network design and demand and supply forecasting in a supply chain	<ul style="list-style-type: none"> The role of network design in supply chain The role of distribution in supply chain The role of forecasting in supply chain. Basic approach to demand forecasting Components of forecast and forecasting method Forecasting in practice
4. Coordination and planning and management of inventory in supply chain	<ul style="list-style-type: none"> Lack of supply chain coordination and the bullwhip effect Managing economies of scale in supply chain The role of safety inventory in supply chain. Determining the safety level of inventory
5. Designing and planning transportation network in supply chain	<ul style="list-style-type: none"> The role of transportation in supply chain Tailored transportation
6. Managing cross functional decisions in supply chain	<ul style="list-style-type: none"> Sourcing decisions in supply chain In house or outsource The procurement process

Subject Learning Outcomes (SLOs)

Upon completion of this subject, students will be able to:

1. Understanding Supply Chain Management as a field of Study. Demonstrate critical comprehension of concepts and theories underpinning today's Purchasing and Supply Chain Management.

2. Demonstrate critical knowledge of the nature and process of purchasing, supplier's management and development and suppliers' performances measurement.
3. Demonstrate an understanding of the impact of the internet on the purchasing function, and the cultural and ethical implications of supply chain management strategies.
4. Apply appropriate theoretical frameworks to the analysis of downstream logistical supply activities, including distribution, warehousing and stores operations.
5. Apply appropriate theory and conceptual frameworks for developing international sourcing strategies.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Task	Weighting (%)
1. Major Project	15 %
2. Test 1	15 %
3. Test 2	15 %
4. Short assignment/Quiz	5%
5. Final Examination	50 %
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project 1:** This is an individual based project worth 15% of the total marks that will be given in week 2 and due in week 13. It is designed to evaluate the understanding of students on the principles of Supply Chain Management and concepts. The students are required to, firstly, identify and select a company, either private or public, and write a 3000-word presentation on their visit to the company's supply chain management by evaluating the concepts and principles of Supply Chain Management used by the chosen company.
- Assessment 2 Test 1:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 7 after completion of topics 1-6. It is designed to assess the understanding of strategic roles of Supply Chain Management and determining, attracting and selecting.
- Assessment 3 Test 2:** The second test is an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 12 after completion of topics 7-11. It is designed to assess the understanding and application of supply chain management.
- Assessment 4 Short Assignment/ Quiz:** This assessment will be under the discretion of the lecturer worth 5% of the total marks that will be given in week 12 after test 2. It is designed to evaluate the understanding and application of the concepts and principles of supply chain management and the implications on an organisation in PNG.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam to be taken in class worth 50% of the overall marks that will be conducted in week 15. It is designed to assess students' understanding of contemporary practices of Supply Chain Management, determining, attracting and selecting supply chain concepts and practises to effectively add value to an organisation. The student will be able to understand how good supply chain management can be a competitive advantage.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14 week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Textbook

1. Chopra, S and P, Meindl. (2013). Supply Chain Management: Strategic, Planning and Operation. 5th edition. Pearsons

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

YEAR 4 SUBJECT SPECIFICATIONS**Subject Specification**

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Marketing Management
Subject Code:	BM411
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20 (4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Prerequisites:	BM211, BM212
Subject Coordinator:	TBA

Synopsis

This subject deal with the marketing management process is the process of analysing markets, consumers, and the development of the marketing mix as well as the managing of the marketing effort in order to gain a competitive advantage.

Subject Topics

Topics	Topic Details
1. Defining Marketing for the 21st Century	<ul style="list-style-type: none">● Importance and Scope of Marketing● Fundamental marketing concepts
2. Marketing Strategies & Marketing Research	<ul style="list-style-type: none">● Steps in developing marketing strategy and Marketing Plan● Steps in Conducting a Marketing Research
3. Creating Customer Value, Satisfaction, & Loyalty	<ul style="list-style-type: none">● Delivery of customer value, satisfaction, and loyalty
4. Consumer Markets & Business Markets	<ul style="list-style-type: none">● Buying behavior & Consumer Decision Making process● Buying situations & Business-to-business buying process
5. Market Segmentation	<ul style="list-style-type: none">● Different levels of market segmentation & Requirements for effective Segmentation
6. Product Pricing Strategies	<ul style="list-style-type: none">● Characteristics and classification of products● Process of setting prices and adapting to varying circumstances
7. Channels of Distribution	<ul style="list-style-type: none">● Marketing channel system and value network
8. Integrated Marketing Communication	<ul style="list-style-type: none">● Major steps in developing effective communications● Designing IMC programs

Subject Learning Outcomes (SLOs)

Upon the completion of this course students will be able to;

1. Understand the fundamental principles, tools and techniques of marketing management and develop the marketing plan, conduct a market analysis;
2. Conduct a market analysis and market research and design the segmentation strategy and articulate the contribution of marketing activities to the value cycle; value creation, value capture, and sustaining value;
3. Analyse and evaluate the consumer market and business market and Segment the market;
4. Analysis and evaluates and design customer – oriented, complete marketing mix strategies on product, price, promotion and distribution in an organization.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Research Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment /Quiz	5%
5. Final Examinations	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1	Major Research Project: This major assignment will be an individual work worth 15% of the total marks that will be given to students in week 2 and fall due in week 12 covering the topics that will be studied during the semester. It is designed to evaluate the students' understanding of fundamental principles, tools and techniques Marketing Management.
Assessment 2	Test 1: This will be a closed book test taken in class worth 15% of the total marks that will be given in week 5 after completion of topics 1-4. It is designed to evaluate students' understanding on the principles, tools and techniques of Marketing Management and further conduct market analysis of the marketing and design effective market segmentation strategies.
Assessment 3	Test 2: This will also be a closed book test taken in class worth 15% of the total marks that will be given to students in week 9 after completion of topics 5-8. It is designed to evaluate students' understanding of consumer and business markets and design customer-oriented marketing mix strategies on product, pricing, promotion and distribution by a firm.
Assessment 4-	Short Assignment/Quiz: This will be a short individual assignment/quiz worth 5% of the total marks that will be given at the discretion of the lecturer during the semester where he/she deems appropriate. It is designed to evaluate the understanding of the students on the principles, tools and techniques of Marketing Management.
Assessment 5	FINAL EXAM: This will be a closed book individual exam taken in class worth 50% of the overall marks that will be conducted in week 15 of the semester. The questions will come from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in Marketing Management.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Charles W.L. Hill, International Business; Competing in the global market place (6th edition), McGraw Hill Inc., America 2012

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF level 7)
Subject Name:	Training & Development
Subject Code:	BM412
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis

This course focuses on employee training and development beginning with an overview of HRD and the strategic role of training to aspect of training such as training needs analysis, design deliver and evaluation. In addition to topics concerning employee development, career and talent management as well as issues and future trends in employee training and development are considered.

Subject Topics

Topics	Topic Details
1. Introduction to Training and Development & Strategic Training	<ul style="list-style-type: none">• Understand the traditional components of T&• Strategic Training and Development process
2. Adult Learning	<ul style="list-style-type: none">• Understand the difference between child and adult learners
3. Training Needs Analysis & Learning Objectives	<ul style="list-style-type: none">• The significance of TNA in a training system• Define and understand the purpose of learning objectives
4. Designing and Delivery Training	<ul style="list-style-type: none">• Design a training program based on identified training requirements• Importance of training methods & Trainers role in delivery of training
5. Evaluating & Managing Training	<ul style="list-style-type: none">• Select appropriate evaluation method• Develop a strategic plan for the training
6. Employee Management	<ul style="list-style-type: none">• Importance of employee development and the different approaches
7. Career Development and Management	<ul style="list-style-type: none">• The value of career development and the stages in career development• Understand the basics and importance of career management and its application to different generations of employees
8. The Future of Training and Development	<ul style="list-style-type: none">• Identify the future trends of training & the components of change model used in new training methods that are likely to influence training departments and trainers

Subject Learning Outcomes (SLOs)

Upon the completion of this course students will be able to;

2. Gain an overview of the field of HRD, the strategic role of Training and development and its contribution to organisational effectiveness and productivity
3. Identify training and development needs through needs analysis and create appropriate training objectives
4. Design and deliver effective training and development programs

5. Evaluate and manage training and development activities/programs. Discuss potential issues that relate to training and identify the future trends that are likely to influence and impact the strategic role of training departments, trainers and professionals.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short assignment /Quiz	5%
5. Final Examinations	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project:** This major assignment is an individual work worth 15% of the total marks that will be given to students in week 2 and collected in week 12 of the semester. It is designed to evaluate the understanding of students in the field of HRD and strategic role of training and development. It is designed to help identify the training needs of the organizations through training needs analysis by creating appropriate training programs. It is designed to further help students understand how to design and deliver effective training programs, evaluate and management training programs and address related issues that may arise in the process of training employees and understand the future trends in training and development.
- Assessment 2 Test 1:** This will be a closed book test taken in class worth 15% of the total marks that will be given in week 5 after completion of topics 1-4. It is designed to evaluate students' understanding on the principles and concepts of HRD and strategic role of training and development, and implementing proper training needs analysis for the organization through creating proper training objectives.
- Assessment 3 Test 2:** This will also be a closed book test taken in class worth 15% of the total marks that will be given to students in week 9 after completion of topics 5-8. It is designed to evaluate students' understanding of designing and delivering effective training and development programs, evaluating and managing the training and development activities and addressing issues related to training and development and the future trends in training and development.
- Assessment 4 Short Assignment/Quiz:** This will be a short individual assignment/quiz worth 5% of the total marks that will be given at the discretion of the lecturer during the semester where he/she deems appropriate. It is designed to evaluate the understanding of the students on the principles, concepts and models of Training and Development.
- Assessment 5 FINAL EXMA:** This is a closed book individual exam taken in class worth 50% of the overall marks will that will be conducted in week 15 of the semester. The Questions will come from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in Training and development.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Raymond A. Noe, Employee Training and Development, 6th Edition, McGraw Hill, 2012
2. Diane Lawlor and Michael Tovey, 4th Edition, Pearson Australia, 2011

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Management Science
Subject Code:	BM413
Duration:	13 Teaching Weeks
Contact hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis

The purpose of this course is to provide students with a fundamental understanding of the various techniques used in Management Science - the attempt to apply mathematical and visual models to solving business problems. This course covers fundamental quantitative methods for business decision making: problem formulation, analysis and use of management science tools. The major topics to be covered will include (but not restricted) to the following: linear programming modeling and solution, distribution problems, assignment and network problems, queuing, inventory management, project management, decision analysis, forecasting, etc. Application of these techniques in areas such as production, marketing, finance, and accounting are covered.

Subject Topics

Topics	Topic Details
1. Introduction to Management Science	<ul style="list-style-type: none"> Management Science Approaches to solving problems Model Construction, Break-Even Analysis & Characteristics of Modeling Techniques
2. Linear Programming & Integer Linear Programming Models	<ul style="list-style-type: none"> Model Formulation, Graphical solutions, Maximization Models & Minimization Models Linear Programming Problems & Integer Programming Models
3. Transportation Models	<ul style="list-style-type: none"> Transportation Modeling & Northwest-Corner Rule Stepping-Stone Method & Unbalanced Problems
4. Assignment Models	<ul style="list-style-type: none"> Facility Location Analysis & Special Issues in Modeling
5. Network Analysis	<ul style="list-style-type: none"> Shortest Route, Minimal Spanning Tree & The Maximum Flow
6. Queuing Theory Models	<ul style="list-style-type: none"> Elements of Waiting Line Analysis and Queuing Systems
7. Project Management (Critical Path Method & PERT)	<ul style="list-style-type: none"> Definition of Projects & Work Breakdown Structure Network Diagram & Critical Path
8. Inventory Management/Decision Analysis	<ul style="list-style-type: none"> Types of Inventory Costs & Costs of Lot-Sizing Policy EOQ & Time Between Orders (TBO)

Subject Learning Outcomes (SLOs)

Upon completion of this course students will be able to:

1. Demonstrate an understanding of the critical role of Management Science to business competitiveness in PNG
2. Understand the basic tools and techniques of Management Science.
3. Apply Management Science concepts into practice through case studies, exercises, internet exercises and discussion questions.
4. Critically analyze and apply tools of Management Science to improve business decision making.
5. Synthesize through individual and group assessments for an in-depth examination of a selected topic related to Management Science and to show the mastering of knowledge acquired during teaching of the subject.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100%. (*Continuous 50% + Examination 50%*)

Assessment Tasks	Weighting (%)
1. Major Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment/Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project:** This major assignment is an individual project worth 15% of the total marks that will be given in week 2 and will be due in week 12 of the semester. There are eight themes related to the topics in which students are required to choose a theme and an organization that will provide them with the opportunity to undertake a critical analysis of application of the Management Science techniques and tools. This assignment will critically enable students to relate the theoretical and practical aspects of the subject in solving factual business problems.
- Assessment 2 Test 1:** This will be a closed book test taken in class worth 15% of the total marks that will be given to the students in week 5 after completion of topics 1-4. It is designed to evaluate the understanding of students in management science approaches and techniques, linear programming, transportation models and assignment models.
- Assessment 3 Test 2:** This will also be a closed book test taken in class worth 15% of the total marks that will be given to the students in week 9 after completion of topics 5-8. It is designed to test the conceptual understanding of students in network analysis, queuing theories, project management tools and, inventory management and decision analysis.
- Assessment 4 Short Assignment/Quiz:** This short assignment/quiz is worth 5% of the total marks that will be given at the discretion of the subject lecturer where he/she deems appropriate. It is designed to further students' understanding on a particular topic that is important in its practice and application.
- Assessment 5 FINAL EXAM:** This will be a closed book individual exam taken in class worth 50% of the total marks that will be conducted in week 15 of the semester. The questions will come from all the topics covered in the semester. Questions will be designed to explore students' conceptual understanding and knowledge in the theories and practices of management science focusing on providing scientific solutions to everyday business problems in the industry.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Taylor, B. (2013) Introduction to Management Science, Global Edition, 11th Edition, Pearson. ISBN-10: 0273766406, ISBN-13: 9780273766407.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	International Business
Subject Code:	BM414
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Subject coordinator:	TBA

Synopsis

The course International Business is designed for fourth (4th) year business students. It is tailored for enhancing participants to understand the basic principles of international business and globalisation in relation to today's ever-changing business environments. In essence, in order for businesses to become competitive and profitable in today's ever-changing environments, professionals are to be well-educated, well-trained who will work to build and maintain long-term customer relations internationally. It further highlights the dynamics of business as inextricably linked creating a global village in business.

Subject Topics

Topics	Topic Details
1. Introduction Globalisation	<ul style="list-style-type: none"> What is globalisation? What are the drivers of globalisation
2. Country differences	<ul style="list-style-type: none"> National Differences in Political Economy The differences in political, economic and legal systems
3. Differences in Culture	<ul style="list-style-type: none"> What are the differences in Culture? Religions and ethical systems
4. Ethics in International Business	<ul style="list-style-type: none"> Ethical Issues in International Business What are the implications for managers?
5. International Trade and Theory	<ul style="list-style-type: none"> Patterns and benefits of international trade What is comparative advantage in International Business?
6. The Political Economy of International Trade	<ul style="list-style-type: none"> The Political Economy of International Trade
7. Foreign Direct Investment	<ul style="list-style-type: none"> Foreign Direct Investment
8. The strategy of International Business	<ul style="list-style-type: none"> The strategy of International Business

Subject Learning Outcomes (SLOs)

Upon the completion of this course students will be able to;

1. Define globalization in relation to international business.
2. Understand the concepts of social, political, legal and economic environments within which multinational corporations operate.

3. Understand and apply strategies in international business, international trade theories and international transactions.
4. Identify the influential factors on exchange rates and correlate the special effects of exchange rates on global financial systems.
5. Understand, analyze and apply concepts, principles and techniques in Foreign Direct Investments, Foreign Exchange Markets, and International Trade.
6. Explore and understand financial strategies for multi-national organizations based on the concepts and principles of Global Production, Outsourcing, Logistics and Global Supply Chain Management.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment /Quiz	5%
5. Final Examinations	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 Major Project

This major assignment is an individual work worth 15% of the total marks that will be given in week 2 and fall due in week 12. It is designed enable students appreciate international trade from an investor's view point by framing together a detailed study of investment in a foreign country where they will be asked to profile two (2) countries that have political, economic and cultural challenges and potentials for investment. Students are asked, as representatives of a huge multinational manufacturer, to invest a substantial amount of capital in one of the countries where they will recommend to the board of directors a particular country to invest considering economic, social and cultural issues. Students in this project will hopefully appreciate the challenges and opportunities when making Investments in others countries. Furthermore, that particular country can be recommended as an ideal destination for those entrepreneurs who aspire to find business opportunities in other countries.

Assessment 2 Test 1: This will be a closed book test taken in class worth 15% of the total marks that will be given in week 5 after completion of topics 1-4. It is designed to evaluate the students' understanding in globalisation and the concepts of differences in political economy and differences in culture. Also, it aims to further explore the significance of ethics and legal issues in a in international business.

Assessment 3 Test 2: This will also be a closed book test taken in class worth 15% of the total marks that will be given in week 9 after completion of topics 5-8. It is designed for students to further develop an understanding of the Political Economy of International Trade, Foreign Direct Investment, and Regional Economic Integration, The international Monetary System and the strategy of International Business.

Assessment 4 Short Assignment/Quiz; This will be a short individual assignment/quiz worth 5% of the total marks that will be given at the discretion of the lecturer during the semester where he/she deems appropriate. It is designed to evaluate the understanding of the student about the topics studied and concepts and sound practices of International Business.

Assessment 5 FINAL EXAM: This will be a closed book individual exam taken in class worth 50% of the overall marks that will be conducted in week 15 of the semester. The questions will come from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in International Business.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

6. Charles W.L. Hill, International Business; Competing in the global market place (6th edition), McGraw Hill Inc., America 2012

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Total Quality Management (TQM)
Subject Code:	BM415
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis.

This course Total Quality Management is designed and tailored for students to study and understand the fundamental concepts of Total Quality Management in today's global business environment. Organizations and firms are emphasizing on investing in quality aspects of their products and service in order to remain competitive in the global market. Therefore, the need for students to understand, differentiate and apply total quality concepts is very crucial. A fundamental understanding of total quality management principles and concepts and their applications to industry will help students develop professional skills that will equip them for challenges in this ever-changing global market place. In addition, they should apply concepts from Total Quality Management theory in a practical sense in order to develop and manage effective quality programs implemented by organisations or firms to achieve a sustainable competitive advantage.

Subject Topics

Topics	Topic Details
1. Introduction Total Quality & Approaches to Quality Management.	<ul style="list-style-type: none">• The total quality approach defined.• Keys to total quality success
2. Quality and Global Competitiveness	<ul style="list-style-type: none">• The relationship between Quality and competitiveness.• Comparisons of International Competitors.

3. Strategic management in Quality management & Quality Management, Ethics, and Corporate Social Responsibility	<ul style="list-style-type: none"> Planning and Execution for Competitive Advantage. Organization's Role in Ethics, Responsibility and Total Quality
4. Quality Culture: Changing Hearts & Customer Satisfaction, Retention, and Loyalty	<ul style="list-style-type: none"> Activating Cultural Change Understanding customer defined Quality & Establishing a customer focus
5. Effective communication in Quality.	<ul style="list-style-type: none"> Understanding the role of communication in TQM Training need assessment for Quality
6. ISO 9000 and Total Quality	<ul style="list-style-type: none"> ISO 9000: The International Standard for Quality Management Systems and its Applications
7. Just-in-Time/Lean Manufacturing and world class manufacturing.	<ul style="list-style-type: none"> Relationship of JIT/Lean to Total Quality
8. Implementing Total Quality	<ul style="list-style-type: none"> Implementing Total Quality Management Service

Subject Learning Outcomes (SLOs)

Upon the completion of this course students will be able to;

1. Appreciate the importance of Total Quality Management.
2. Understand the concepts of Total Quality in the competitive global context.
3. Understand and develop framework for Total Quality implementation strategies.
4. Define and understand ethics and corporate social responsibility in relation to Total Quality.
5. Effective communication in Total Quality Management.
6. Understanding the global quality concepts and ISO 9000 global quality standards management.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment /Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 Major Project: This major research assignment is an individual work worth 15% of the total marks that will be given in week 2 and will be due in week 12. It is designed for students to visit a local manufacturing company that applies International Quality Standards in their operations and they are required to complete a report on their visit and critically analyse the company's application of internationally accepted Total Quality Management systems and standards. In this case the company chosen is International Food Corporations Ltd which supplies the local market with canned mackerel as well as exporting Tuna loins to the European market.

Assessment 2 Test 1: This will be a closed book test to be taken in class worth 15% of the total marks that will be given to the students in week 5 after the completion of topics 1-4. It is designed to find out about the students' understanding of Total Quality Management, quality and global competitiveness, strategic management in quality and corporate responsibility in quality management.

Assessment 2 Test 2: This will also be a closed book test to be taken in class worth 15% of the total marks that will be given in week 9 after completion of topics 5-8. It is designed for students to further develop a deeper

- understanding of Total Quality Management in following topics: Quality Culture: Changing Hearts, Effective communication in Quality and Customer Satisfaction, Retention, and Loyalty
- Assessment 4** **Short Assignment/Quiz:** This will be a short individual assignment/quiz worth 5% of the total marks that will be given at the discretion of the lecturer when she/he deems appropriate. It is designed to evaluate the understanding of the students about the topics studied and concepts and sound practices of Total Quality Management.
- Assessment 5** **FINAL EXAM:** This is a closed book individual exam to be taken in class worth 50% of the overall marks that will be conducted in week 15 of the semester. The Questions will come from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in Total Quality Management.

Student Workload

The total workload of the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

- Goetsch, David L. and Davis, Stanley (2012). Quality Management for Organizational Excellence: Introduction to Total Quality (7th edition). Prentice-Hall.

Relevant Unitech Policies

It is important that all students familiarize themselves with the PNG University of Technology Assessment Guidelines including those on plagiarism at (<http://www.unitech.ac.pg/unitech/policies/academic-integrity>) and also examination rules (<http://www.unitech.ac.pg/unitech/policies/procedures-university-examination>, PNG University of Technology graduate attributes can be found on <http://www.unitech.ac.pg/unitech/graduateattributes>)

Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	International Marketing
Subject Code:	BM421
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Prerequisites:	BM211, BM414
Subject Coordinator:	TBA

Synopsis

This course will present various concepts and tools for analysing international marketing strategies, and evaluating the marketplace (competitors, external environment: cultural, economic, technological, political/legal, marketing opportunities, etc.). Specifically, the focus will be on developing, evaluating and implementing international marketing strategy at the corporate, regional and local levels. By learning about both theory and practice, the student will obtain a good conceptual understanding of the field of International Marketing as well as become firmly grounded in the realities of the global marketplace.

Subject Topics

Topics	Topic Details
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1. Introduction to International Marketing & The Economic Environment	<ul style="list-style-type: none"> Globalization of Markets: Convergence and Divergence and Evolution of Global Marketing Emerging Economies & Evolution of Cooperative Global Trade Agreements- Regional Economic Arrangements
2. Political and legal environment	<ul style="list-style-type: none"> Political Environment & International Agreements & International Law and Local Legal Environment
3. The Cultural Environment and Buyer Behavior	<ul style="list-style-type: none"> Definition of Culture & Elements of Culture and Adaptation to Cultures Global Customer Relationship Management
4. Global Marketing Research & Global Segmentation	<ul style="list-style-type: none"> Management Global Marketing Research & Segmentation –Reasons and Approaches
5. Entry Strategy & Global Marketing Strategy	<ul style="list-style-type: none"> Selecting the Target Market & Choosing the Mode of Entry Global Marketing Strategy
6. Product Strategy & Customer Communications	<ul style="list-style-type: none"> Global Product Strategies Global Advertising and Culture
7. The Channels of Distribution & Pricing	<ul style="list-style-type: none"> Management of Global Logistics Drivers of Foreign Market Pricing
8. Export and Import Management	<ul style="list-style-type: none"> Organizing for Exports & Mechanics of Importing

Subject Learning Outcomes (SLOs)

Upon the completion of this subject, students will be able to;

1. Ability to understand and explain the principles and practices of the organization in terms of international marketing
2. Identify and analyse opportunities within international marketing environments
3. Conduct a market analysis and market research to develop and design the segmentation and entry strategies for a new in the international market
4. Conceive, develop, and implement an effective global marketing strategy
5. Analysis and evaluates and design customer – oriented, competitive marketing mix strategies on product, price, promotion and distribution for the international market
6. Explain how to design and develop the export and import management strategy for the global market.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Research Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment /Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

Assessment 1 Major Research Project: This major assignment is an individual work worth 15% of the total marks that will be given to students in week 2 and fall due in week 12. It is designed to evaluate students' understanding of principles and practices of firms in international marketing, identifying the opportunities

and threats, developing and implementing effective global marketing strategies, and analysing the consumer needs through developing a complete marketing mix for the firm in international marketing contexts.

- Assessment 2** **Test 1:** This will be a closed book test taken in class worth 15% of the total marks that will be given in week 5 after completion of topics 1-4. It is designed to evaluate the students' understanding on the principles and practices international marketing by analysing the opportunities available in the global environment for a firm.
- Assessment 3** **Test 2:** This will also be a closed book test taken in class worth 15% of the total marks that will be given to students in week 9 after completion of topics 5-8. It is designed to evaluate students' understanding on developing and designing appropriate segmentation and entry strategies for a firm, implement effective global marketing strategies and design customer-oriented competitive marketing mix strategies.
- Assessment 4** **Short Assignment/Quiz:** This will be a short individual assignment/quiz worth 5% of the total marks that will be given at the discretion of the lecturer during the semester where he/she deems appropriate. It is designed to evaluate the understanding of the students on the principles and practices of international marketing.
- Assessment 5** **FINAL EXAM:** This will be a closed book individual exam taken in class worth 50% of the overall marks that will be conducted in week 15 of the semester. The questions will come from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in International Marketing.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. International Marketing, 6th Asia-Pacific Edition Masaaki (Mike) Kotabe ISBN : 978-1-118-80076-8 Production: John Wiley & Sons Australia, Ltd ,Published: 2018

Relevant Unitech Policies

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Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Strategic Management
Subject Code:	BM422
Duration:	13 teaching weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis

This course explores the importance of strategy, its formulation and its management. The course content focuses on strategy formulation, implementation and monitoring, and evaluation of strategy. It also focuses on the importance of strategic management tools or instruments and its relevance to any organization (both public and private organizations). The course also explores the relationship between strategy, internal and external environment, social inclusion and management in the organization and their effect in society at large. During lectures, case studies and tutorials, discussions will always seek to assess how these tools can be used in the workplace to be competitive in this fast-changing world.

Subject Topics

Topics	Topic Details
1. Introduction to Strategic Management	<ul style="list-style-type: none">• Introduction to Strategic Management
2. The Perspective of Strategic Management	<ul style="list-style-type: none">• The Strategic Management Process
3. The Strategic Environment	<ul style="list-style-type: none">• Evaluating the Firm's External Environment• Evaluating the Firm's Internal Capabilities
4. Competitive Advantage	<ul style="list-style-type: none">• Corporate-Level Strategies• Business-Level Strategies• Developing Competitive Strategies through the Resources (Resource-based view of the firm)
5. The Dynamics of Strategic Management	<ul style="list-style-type: none">• The Strategic Alliances• Mergers and Acquisitions
6. Strategic Management & Ethics	<ul style="list-style-type: none">• Ethics, Responsibilities and Sustainable Strategies

7. The Application of Strategic Management	<ul style="list-style-type: none"> Implementing Strategic Change Current Trends in Strategic Management
8. Practical Cases and Analysis	<ul style="list-style-type: none"> Strategic Management Cases and Analysis

Subject Learning Outcomes (SLOs)

Upon the completion of this subject, students will be able to;

1. Demonstrate an understanding of key concepts associated with Strategic Management.
2. Demonstrate an understanding of external and internal factors to the organization that influence the development and execution of strategies.
3. Explain strategic options that an organization can employ in different environments and industries in PNG.
4. Apply strategic management knowledge in the analysis of actual business cases.
5. Critically analyze and apply the tools of Strategic Management to improve decision business making.
6. Synthesize through individual and group assessments/case study, in-depth examination of a selected topic related to Strategic Management, to show mastering of knowledge acquired during the semester.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*)

Assessment Tasks	Weightings (%)
1. Major Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment /Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project:** The major assignment will be an individual project worth 15% of the total marks that will be given in week 3 and will be due in week 10. It is designed to evaluate the understanding of students in Strategic Management concepts and principles.
- Assessment 2 Test 1:** This is an individual closed book test to be taken in class worth 15% of the total marks that will be given to students in week 5 after the completion of topics 1-4. It is designed to assess the students' understanding and applications of basic Strategic Management concepts and principles and their understanding on the impact that the firm's internal and external environment have on the firm.
- Assessment 3 Test 2:** This will also be an individual closed book test to be taken in class worth 15% of the total marks that will be given to students in week 9 after completion of topics 5-8. It is designed to assess the students' understanding of the firm's environments, how a firm might gain a competitive advantage over rivals and maintaining strategic alliances that gives the leverage in the industry to remain competitive.
- Assessment 3 Short Case Analysis/Quiz:** This will be an individual/ group assessment worth 5% of the total marks that will be given to students at the discretion of the lecturer during the semester when she/he deems appropriate. It is designed to assess the understanding of students on the concepts, theories and practices in Strategic Management aimed at application of Strategies and its impacts on the firm.
- Assessment 5 FINAL EXAM:** This will be a closed book exam to be taken in class worth 50% of the overall marks that will be conducted in week 15 of the semester. The questions will come from all the topics covered during the semester. Questions will be designed to explore students' knowledge and skills in Strategic Management.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book

1. Barney, J.B. and Hesterly, W.S. (2019) Strategic Management and Competitive Advantage, 6th Edition. Prentice Hall.

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Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Research Project in Management
Subject Code:	BM423
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Prerequisites:	BM314, BM321
Subject Coordinator:	TBA

Synopsis

The general aim of Research Project in Management course is to enable students to carry out an independent research study on their own chosen topic in management. Especially, students have to master the following in details; (i). Determine what research problem(s) to do research on, in the area of general management and how to formulate the research problem(s); (ii). How to structure the inquiry and collection of data; (iii). How to analyse raw data through quantitative and qualitative methods; (iv). How to interpret and draw conclusions that will be valuable, constructive and useful to managers and future researchers. Good researchers develop good research questions, sound design and analysis procedures, give appropriate interpretation and meaning to the data. The objective of this course is to help students develop a sense of the art, craft and science associated with doing an effective research project.

Subject Topics

Topic	Topic Details
1. Introduction	● Introduction of Research Project in Management
2. Research Process, Selection of the Research Topic	● Choose a Research Topic
3. Literature Review	● Literature Review and Research Questions on the topic
4. Research Methodology	● Research Methodology
5. Data Analysis and Discussions	● Statistical tools and data analysis and interpretations
6. Conclusions and Recommendations	● Conclusions and Recommendations
7. Final Presentation	● Final Presentation
8. Submission of Final Report	● Final report is considered as the Final Examinations

Subject Learning Outcomes (SLOs)

Upon the completion of this subject, students will be able to;

1. Show an understanding of research design, methods and strategies needed to conduct credible research.
2. Demonstrate skills in reading, interpreting and critiquing past studies related to a particular research topic, and identifying their strengths and weaknesses.
3. Analyse and evaluate real-life data and information
4. Plan and carry out a program of independent research with minimum supervision
5. Synthesize data analysis, research findings and discussions in order to draw valid conclusions, implications and communicate the findings effectively.

Assessment Tasks and Weightings- 30% Continuous & 70% Final Submission

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (*Continuous 30% + Examination 70%*).

Assessment Tasks	Weighting (%)
1. Research Proposal	10%
2. Presentation	20%
3. Final Submission and Presentation	70%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Research Proposal:** This will be an individual work worth 10% of the total marks that will be given to students in week 2 of the semester. It is designed to evaluate the understanding of students in research design, methods and strategies, and skills in reading, interpreting and critiquing past researches.
- Assessment 2 Presentation:** This will be an individual presentation of the research project by student in class worth 20% of the total marks that will be scheduled for week 12. It is designed to evaluate the comprehension of students about the research design, methods and strategies of their research projects, and demonstrate necessary skills in presenting, analysing, interpreting and providing recommendations about their research projects.
- Assessment 3 Final Submission of Research Project:** This will also be an individual work taken in class worth 70% of the total marks that students will complete after receiving feedbacks and criticism from their presentation. It is designed to evaluate the students understanding of research concepts, tools and principles pertaining to their research project.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text

1. Mark N. K. Saunders; P, Lewis and A, Thornhill. (2020). Research Methods for Business Students. 8th Edition, Financial Times Press.
2. Mark N.K. Saunders (2012) Research Methods for Business Students, 6th Edition, Financial Times Press
3. Quinlan, C. (2011). Business Research Methods. South-Western/Cengage Learning
4. Cooper, R, D and P, S, Schindler. (2008). Business Research Methods with Students DVD. 10th Edition, McGraw Hill/Irwin
5. Ghauri, P and K, Gronhaug (2010). Research Methods in Business Studies. 4th Edition, Pearson Education

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Subject Specification

Course:	Bachelor of Business in Management (NQF Level 7)
Subject Name:	Project Management
Subject Code:	BM424
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Subject Coordinator:	TBA

Synopsis

This course explores the importance of projects, its identification, formulation and execution in a systematic approach in management. The course content focuses on activities related to project planning and estimating project scope and schedule. It also examines processes for managing project resources. This course is designed to enrich students who can be able to plan and estimate project scope, resources, and schedule. This course inclusively covers project implementation, monitoring and evaluation as an integral part of the study. The course also explores the relationship between resources available and expected outputs, social inclusion and management in the organizations and their effect in society at large. During lectures, case studies and tutorials, discussions will always seek to assess how these tools can be used in the workplace to be competitive in the fast-changing business world.

Subject Topics

Topics	Topic Details
1. Introduction to Project Management	<ul style="list-style-type: none">• Why Project Management?• Project Selection and Portfolio Management
2. The Dynamics of Project Management	<ul style="list-style-type: none">• Leadership and the Project Manager• Scope Management
3. The Conflict and Risk Management in Projects	<ul style="list-style-type: none">• Project Team Building, Conflict, and Negotiation
4. Risk Management in Projects	<ul style="list-style-type: none">• Risk Management
5. The Functions of Project Management	<ul style="list-style-type: none">• Cost Estimation and Budgeting• Project Scheduling: Networks, Duration Estimation, and Critical Path• Project Scheduling: Lagging, Crashing, and Activity Networks
6. The Applications of Project Management	<ul style="list-style-type: none">• Advanced Topics in Planning and Scheduling: Agile and Critical Chain• Resource Management
7. Evaluation and monitoring projects	<ul style="list-style-type: none">• Project Evaluation and Control
8. Project Completion	<ul style="list-style-type: none">• Project Closeout and Termination

Subject Learning Outcomes (SLOs)

Upon the completion of this subject, students will be able to;

1. Demonstrate an understanding of key concepts associated with Project Management
2. Demonstrate an understanding of leadership, scope and risk management, cost estimation, budgeting and the scheduling of the project.
3. Explain the functions of project management that an organization can employ in different environments and industries in PNG

4. Apply Project Management knowledge in the planning, scheduling; agile and critical chain.
5. Critically analyse and apply tools of Project Management to initiate resource management, project evaluations and controls.
6. Synthesize through individual and group assessments/case studies, an in-depth examination of a selected topic related to Project Management, to show mastering of knowledge acquired during the semester

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this subject, 50% overall weighted average must be scored from the total 100%. (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Project	15%
2. Test 1	15%
3. Test 2	15 %
4. Short Assignment/Quiz	5%
5. Final Examination	50 %
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project:** The assignment will be an individual based project (Major paper) worth 15% of the total marks that will be given in week 2 and fall due on week 12. It is designed to evaluate the understanding of students in Project Management concepts and principles.
- Assessment 2 Test 1:** This will also be an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 5 after completion of topics 1-4. It is designed to assess the students' understanding of Project Management concepts and tools.
- Assessment 3 Test 2:** This will also be an individual closed book test to be taken in class worth 15% of the total marks that will be given in week 9 after completion of topics 5-8. It is designed to assess the students' understanding and applications of basic Project Management concepts and principles.
- Assessment 4 Short Case Analysis/Quiz:** This will be an individual/ group assessment worth 5% of the total marks that will be given at the discretion of the lecturer during the semester when she/he deems appropriate. It is designed to elevate the understanding of students on the concepts, theories and tools in Project Management aimed at application of Project Management and its impacts.
- Assessment 5 FINAL EXAM:** This will be an individual closed book exam to be taken in class worth 50% of the total marks that will be conducted in week 15 of the semester. The questions of the exam will be comprised of topics covered in the semester. The exam is designed to examine the students' basic understanding and application of concepts, frameworks and tools of Project Management.

Student Workload

The total workload for the subject for the 'average' student is a nominal 150 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Subject Text Book

1. Duane Petersen. Transforming Project Management: An Essential Paradigm for Turning Your Strategic Planning into Action 2021
2. Pinto, J.K. (2016) Project Management; Achieving Competitive Advantage, 4th Edition, Prentice Hall

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Subject Specification

Course: Bachelor of Business in Management (NQF Level 7)

Subject Name:	Change Management
Subject Code:	BM425
Duration:	13 Teaching Weeks
Contact Hours:	6 hours per week
Credit Points:	20(4 hrs lect + 1hr tut + 1hr Project)
Delivery Mode:	On campus
Prerequisites:	BM311
Subject Coordinator:	TBA

Subject Synopsis

Managing change is a critical component of any major transformation. It is a necessary process that helps companies successfully implement new strategies. Change management gets results by building sponsorship from the top, creating leaders who will act as change agents, and by changing behaviors in frontline teams and individual employees in business units. Taking this subject and applying it to the local context is the focus of Change Management.

Subject Topics

Topic	Topic Details
1. Introduction to Change Management	<ul style="list-style-type: none"> The new trends in Change Management & Principles of Change Management
2. Environmental Forces that influence change	<ul style="list-style-type: none"> Internal & External factors for change.
3. Planning for Change in Organizational	<ul style="list-style-type: none"> Analyzing the change process & Barriers for change Determining overall organizational support for change
4. Understanding Change strategy and change	<ul style="list-style-type: none"> Change Management strategy.
5. Change tools New Forms of Organizing	<ul style="list-style-type: none"> Exploring new and emerging organizational design & Organizing for the future.
6. Leadership for Change & Power and Resistance to Change	<ul style="list-style-type: none"> Dimensions of change leadership. Dimensions of power & Empowering management practices
7. Measuring, Monitoring and Maintaining Change & Implementing the change	<ul style="list-style-type: none"> Measuring change and benchmarks. Employees participation, exploiting opportunities of the change & Maximizing the outcome of the change
8. Different Models of Change Management & Change & Sustainability	<ul style="list-style-type: none"> Kotter's Model for change, Lewin's model for change & ADKAR model for change Identify the problems associated with change outcomes, Negative aspects of change management. Factors influencing sustainability of change

Subject Learning Outcomes

Upon completion of this subject, students will be able to;

1. Understanding the perspective on managing organizational change
2. Develop the strategy and tools for change Management
3. Understand the appropriate leadership for change
4. Understand the power and resistance to change Management
5. Measuring, monitoring and maintaining organizational Change

6. Analyze and apply the different models for change.

Assessment Tasks and Weightings – 50% Continuous & 50% Examination

To obtain a pass grade in this Subject, 50% overall weighted average must be scored from the total 100% (*Continuous 50% + Examination 50%*).

Assessment Tasks	Weighting (%)
1. Major Project	15%
2. Test 1	15%
3. Test 2	15%
4. Short Assignment/Quiz	5%
5. Final Examination	50%
TOTAL	100%

Students must also refer to the Subject Assessment Details.

- Assessment 1 Major Project:** This major assignment will be an individual work worth 15% of the total marks that will be given to students in week 2 and collected in week 11 of the semester. It is designed for students to work in groups where they are asked to frame together a detailed study of any business entity where successful change management strategies have been applied. They will be required to demonstrate their understanding of the concepts behind change management being applied in these companies. What would have been the alternative outcome if changes were not adopted? Students in this project will hopefully appreciate the challenges and opportunities involved in change management when presenting these reports.
- Assessment 2 Test 1:** This will be a closed book test to be taken in class worth 15% of the total marks that will be given to the students in week five (5) after the completion of topics 1-4. It is designed to find out about the students' understanding of Change management in today's ever-changing world. It will enable them to appreciate the importance of the concepts and issued related to Change management.
- Assessment 3 Test 2:** The second test will also be a closed book test taken in class worth 15% of the total marks that will be given to students in week 10 after completion of topics 5-8. It is designed for students to further develop and understanding the importance of Change Management in this ever-changing economic environment. It will cover the importance of leadership for change, change sustainability and analysing different models of change.
- Assessment 4 Short Assignment/Quiz:** This will be an individual assignment/quiz worth 5% of the total marks that will be given to the students at the discretion of the lecturer during the semester when she/he deems appropriate. It is design to evaluate the understanding of students on the principles, tools and models and their relative importance to change management and organizational adaptability.
- Assessment 5 FINAL EXAM:** This is a closed book individual exam to be taken in class worth 50% of the overall marks will that will be conducted in week 15 of the semester. The Questions will come from all the topics covered in the semester. Questions will be designed to explore students' knowledge and skills in Change Management.

Student Workload

The total workload for the subject for the 'average' student is a nominal 60 hours, based on a 14-week semester with 13 weeks of teaching as per the PNG National Qualification Framework.

Text Book:

1. Graetz, F; Rimmer, M; Smith, A and A, Lawrence. (2019). Managing Organizational Change. 3rd Edition, Pearson's Education, Australia.

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