

# UNIT PRESCRIPTIONS

## University Preparatory Certificate Level 4

### **ACC401 Basic accounting 1**

Prerequisite: ACC301 and ACC302 or A pass in Year 12 examination or equivalent, with some business or accounting from high school education is essential

Semester 1: Offered on F-F mode                      Semester 2: Not offered

This unit is based on the expansion of knowledge learnt in Year 11 and Year 12. There are altogether five strands in this unit. These include;

- **Nature of accounting**

Broadens students' knowledge on the conceptual framework, accounting framework, accounting concept, ethics and institutions that govern the accounting profession in the Solomon Islands and abroad. It also emphasises fraudulent acts and institutions that deal with fraudulent activities.

- **Partnership accounting**

Provides insights into how a partnership business is formed, including the preparation of general journal entries and statements of financial position. It emphasises the preparation of final accounts incorporating balance day adjustments and capital adjustments.

- **Company accounting**

Deals with processing financial information of company business in terms of its formation, preparation of general journal entries and statement of financial position. It also highlights the preparation of final accounts of a company.

- **Cash flow statements**

Deals with preparation and interpretation of cash flow statements.

- **Analysis and interpretation of financial statements**

Involves the calculation and interpretation of ratios and percentages through vertical, horizontal and trend analysis of company business.

**ACC402 Basic accounting 2**  
Prerequisite: ACC401  
Semester 1: Not offered

Semester 2: Offered on F-F mode

This unit is based on the expansion of knowledge learnt in Years 11 and 12. There are altogether six strands in this course.

- **Accounting Systems and Internal Control**

Broadens the student's knowledge on the factors which influence the design of an accounting system and the internal control procedures for its effectiveness.

- **Managerial Accounting**

Managerial accounting focuses primarily on the preparation of reports for internal users of financial information, such as the managers and officers of a company. In today's rapidly changing global environment, managers often make decisions that determine their company's fate—and their own. Managers are evaluated on the results of their decisions. Managerial accounting provides tools for assisting management in making decisions and for evaluating the effectiveness of those decisions.

- **Job Order Costing**

Provides an overview of the flow of costs in a job order cost accounting system. It focuses on how the manufacturing costs are assigned to specific jobs.

- **Cost-Volume-Profit**

Highlight the considerations involved in cost behaviour analysis and discuss and illustrate Cost-Volume-Profit (CVP) analysis.

- **Budgetary Planning**

The primary focus is budgeting—specifically, how budgeting is used as a *planning tool* by management.

- **Incremental Analysis and Capital Budgeting**

Explains the management's decision-making and evaluation process by using incremental analysis and capital budgeting.

**AGR406 Agriculture science III**

Prerequisite: AGR301 or A pass in Year 12 examination or equivalent  
Semester 1: Offered on F-F mode Semester 2: Not offered

This unit provides avenues to explore some of the current issues and trends in the agriculture sector in the Solomon Islands, and to enhance understanding on the relationship between soil, and how it affects crop and animal production. This unit is also designed to help students develop the ability to apply a scientific approach in their study of various topics that include soil management, plant breeding, post-harvest handling and management, identifying diseases and pests, and its control in crop protection. Furthermore, it reinforces the relationship between agriculture and human nutrition, which is critical in addressing our nutritional status. Subsequently, students will develop a positive attitude towards farming and rural development, and appreciate the way in which improved agriculture practices can be used to alleviate the challenges associated with climate change and malnutrition in society.

**AGR407 Agriculture science IV**

Prerequisite: AGR302 or A pass in Year 12 examination or equivalent  
Semester 1: Not offered Semester 2: Offered on F-F mode

This unit is built upon the knowledge learnt in AGR302. It covers various topics under the following main topics:

1. Post-harvest technology and management – definitions and highlights the importance of post-harvest loss technology, causes, and measures to prevent post-harvest loss
2. Soil water management – definitions, problems in soil water management, the solution to soil water management problems in the Solomon Islands, and the pacific islands countries
3. Soil conservation – definitions, practices that degrade soil, soil conservation practices, concerning the growing system, and ecosystem, local example of soil conservation
4. Application of GIS in agriculture – definitions, importance and uses of GIS in agriculture.

**BIO401 Introduction to organism forms and molecular biology**

Prerequisite: A pass in Year 12 examination or equivalent  
Semester 1: Offered on F-F mode Semester 2: Not offered

This is an expansion of the knowledge learnt in UPC3 and/or Year 12 biology studies. The purpose of this unit is to introduce students to other biological levels of the organism in plants and animals, including the immune system, control of body temperature and water balance, hormones and endocrine system, nutrition and reproduction to embryonic development; and how these systems are coordinated in organisms. Plant growth, hormones and defense mechanism are discussed and compared to the animal kingdom. Students will also be introduced to the detailed structure of DNA and RNA replication, and different roles played by enzymes in the process are highlighted and discussed. Finally further insights are presented on the roles of DNA in the human genome.

**BIO402 Introduction to ecological studies**

Prerequisite: A pass in Year 12 examination or equivalent  
Semester 1: Not offered Semester 2: Offered on F-F mode

This is an introductory unit to the study of ecology. It introduces the classification of plants and animals, and examines various biological methods used for classification. It also provides further insights into the science of ecology, linking biodiversity and conservation. The unit is designed to increase student's awareness about the environmental issues, problems and appropriate solutions; and furthermore, to develop in them an attitude and behaviour that will set a framework to protect our unique and fragile ecosystem.

**CHE401 Fundamentals of chemistry A**

Prerequisite: CHE301 and CHE302 or A pass in Year 12 examination or equivalent  
Semester 1: Offered on F-F mode Semester 2: Not offered

This unit is designed to help students develop a broader understanding of chemistry concepts. The unit provided avenues for students to apply the concepts they learnt on various relevant topics. Topics covered in this unit include, limits of measurements and dimensional analysis, quantum mechanics, resonance and valence bond theory (shapes), intermolecular forces (surface tension, viscosity etc.), stoichiometry (mole to mole and mass to mass), theoretical and percentage yield of reactants, solubility structure and equilibria.

**CHE402 Fundamental chemistry B**

Prerequisite: CHE401  
Semester 1: Not offered Semester 2: Offered on F-F mode

This unit is designed to help students develop a strong understanding of chemistry concepts. It provides avenues for students to apply the concepts they learnt on various topics, including carboxylic acids and esters, lipids, carbohydrates, ether and amines, chemical kinetics, reaction rate mechanism, equilibrium constant calculation, entropy, Gibbs free energy, properties for ions and salts, buffers, standard potential, cell potential and battery.

**CSC401 Introduction to information system**

Prerequisite: Nil  
Semester 1: Offered on F-F mode Semester 2: Not offered

This unit provides students with a basic understanding of Information Systems and different business disciplines that emphasis how Information System is vital in an electronic world. Understanding the impact of Information Systems on the business world is important to the work of business professionals because BIS serves as a bridge between management and operation. Mastering both business and Information System technology skills and knowledge, especially through online systems and applications, creates job opportunities and a better competitive advantage. These can better contribute to shaping a company's strategy and operation. This unit gives the student hands-on experience on common business applications.

**CSC402 Introduction to information communication technology**

Prerequisite: CSC401

Semester 1: Not offered

Semester 2: Offered on face-to-face mode

This unit covered the following topics: Introduction to computer technology, computers and you; communication and sharing resources; digital communication; systems analysis and design; system software; database; database management system; database security; distributed database design and integration; overview of query processing; query decomposition and data localization; and optimization of the distributed query.

**ECO401 Scarcity, market and government intervention**

Prerequisite: A pass in ECO301, ECO302 or Year 12 Economics examination.

Semester 1: Offered on face-to-face mode

Semester 2: Not offered

The unit will introduce you to Economics and intermediate Microeconomics topics inclusive of Production Possibility Model, the changes in market equilibrium, types of market structures, market failures and ways government intervene to control market failures. These topics are expansions on what you have learnt in Year 11 and 12 Economics.

**ECO402 Fiscal policy and monetary policy**

Prerequisite: ECO401 or a pass in the Year 12 Economics examination

Semester 1: Not offered

Semester 2: Offered on face-to-face mode

This unit will introduce you to various topics which include two important policies that government can implement to help stabilize the economy. It also provide students insight into government budget and budget outcomes, fiscal policy and its implications on government macroeconomic goals. Through the study of this unit, students will be provided with an opportunity to examine the roles and functions of the Central Bank of Solomon Islands, and its implementation of monetary policy in the last 3 to 4 years.

**ELL401 Writing and grammar**

Prerequisite: A pass in ELL301 or in Year 12 English examination, or equivalent.

Semester 1: Offered on face-to-face mode

Semester 2: Not offered

This unit is divided into two sections. In section one, you will be introduced to essential study skills to help you succeed in your tertiary studies. You will also learn about vast resources which are available in the university library, the usefulness of computers in your research and written work, and how to effectively manage your time. In section two, you will learn how to present information in researched essays and reports. Concurrently, you will work on a number of grammar exercises that will help you better remedy common persistent and pervasive errors in English grammar. You are expected to do your research, analyse readings, and present information in a simple and logical sequence. The lessons are interactive and therefore you are encouraged to do your readings, attend lectures, and work on your tutorial questions so that you will be able to share your insights and viewpoints during the tutorials. Do not hesitate to ask questions if you need assistance in understanding a concept or topic of discussion.

**ELL402 Poetry and drama**

Prerequisite: Nil

Semester 1: Not offered

Semester 2: Offered on face-to-face mode

In this course we study the work of a number of poets from the Solomon Islands and other countries together with a short play. You will find that your previously gained knowledge will enable you to understand the two genres with greater competence and enjoyment. You will also learn the special features of poetry and drama that will enhance your knowledge of these genres. The lessons are interactive and students will be encouraged to analyse the texts and present and share their insights and viewpoints in the tutorials.

**GEO401 Physical Geography 2**

Prerequisite: GEO301

Semester 1: Offered on Face-to-Face mode

Semester 2: Not offered

This unit is the second foundational unit on the study of physical geography, and it builds on the knowledge learnt in GEO301. It began with an introduction to tools Geographers use, and went on to further expound on the topics of earth environments and systems; atmospheric pressure, winds and circulation systems, and global climate and climate change. Other topics covered in this unit include soils and soil development, plate tectonics and processes, fluvial processes and landforms, and global biogeographical process, particularly in relation to human impact on carbon cycle energy and matter flow in the ecosystems; and the exploitation of the low latitude rainforest ecosystem.

**GEO402 Human Geography 2**

Prerequisite: GEO302

Semester 1: Not offered

Semester 2: Offered on Face-to-Face mode

This is the second foundational unit on the study of human geography, and it builds on the knowledge learnt in GEO302. The unit covered a broad range of topics. These include, cultural identities and landscape; nature and functions of cities, and the urban land use patterns and processes; concepts of maps, remote sensing and GIS. The unit introduced theories of economic development, further dwells on the industrial and economic development patterns and processes, including growth and diffusion of industrialization. Economics geography in respect to manufacturing and services was also discussed, and finally the political ordering of space. The latter focused particularly on the national political units, international political systems, and the local and regional political forms.

**HEC401 Textiles and design**

Prerequisite: A pass in Year 11 Home Economics examination or equivalent

Semester 1: Offered on face-to-face mode

Semester 2: Not offered

This unit is designed to develop strong foundational content knowledge to support the learning of the subject in the Diploma and Degree programmes respectively. This unit enables students to evaluate and appreciate the role of technology in fabric development and teaches students to design, make, and evaluate a textile-based product, using appropriate tools and techniques with safety and confidence.

**HEC402 Introduction to food, nutrition, and health studies**

Prerequisite: A pass in Year 11 Home Eco examination or PSSC food technology examination.

Semester 1: Not offered

Semester 2: Offered on face-to-face mode

This unit introduces you to the study of food, nutrition and health. It provides insights into the relationship food and nutrition have with health and healthful living. It lays the foundation upon which the knowledge, skills and attitudes for living a healthy lifestyle, as building blocks will be formed and realized throughout the study of the Food and Nutrition courses in the Home Economics program. The concepts of food, nutrition, balanced diet, malnutrition and health, are considered in this study. It covers the socio-cultural, political and economic factors and how they influence food and its use, food habits and lifestyle. An awareness of the Nutritional Disorders, Diet-related and Lifestyles Health issues prevalent in the Solomon Islands will also be briefly uncovered in this study.

**HIS401 UPC History III**

Prerequisite: Nil

Semester 1: Offered on face-to-face mode

Semester 2: Not offered

This unit will introduce students to General Pacific History and discuss settlement in the region of Oceania. Students through this course will accumulate diverse skills including chronological understanding of past events. Objective knowledge of historical periods and critical analysis. By taking this course, students will appreciate and understand Pacific History and most importantly their

national history. Furthermore, students will be familiarized with different perspectives in historical interpretations and various approaches of historians.

HIS402 UPC History IV  
Prerequisite: Nil  
Semester 1: Not offered Semester 2: Offered on face-to-face mode

This course will create an understanding of some important social, economic and political issues of the Nineteenth and the Twentieth centuries. The students learn skills needed to investigate people and events in relation to their cultures, resources and environments, which will enable them to gain a better understanding of how individuals and groups interact with each other and their environments. The unit begins with a focus on human colonization of the Pacific and experiences of colonialism under different colonial powers. It covers the period of the two World Wars, the rise of independence movements, the Cold War era, post-independence instability and neo-colonialism.

**MTH401 Introduction to algebra, differentiation and trigonometry**  
Prerequisite: A pass in MTH301 & MTH302 or equivalent  
Semester 1: Offered on face-to-face mode Semester 2: Not offered

This Unit offers the content in trigonometry identities, solving trigonometric equations, sums and difference and double angle formula, factorization, expansions of algebraic expression and partial fractions, techniques of differentiation (including Trigonometry, exponential and logarithm functions etc.), vectors and numerical solutions to equations. The Unit will then cover their applications to real-life situations.

**MTH402 Introduction to integration & Linear algebra**  
Prerequisite: A pass in MTH401 or equivalent  
Semester 1: Offered on face-to-face mode Semester 2: Not offered

This unit offers the contents in indefinite and definite integrals, linear algebra, complex numbers and applications. The depth of the unit will touch on areas between curves, integration by substitution and parts and other approximation techniques such Trapezoid and Simpson method, matrices (operations, inverse, determinant etc. ....), and Gauss- Jordan elimination on a system of a linear equation and complex numbers (graphing, operations etc. ...).

**MTH404 Non-science mathematics**  
Prerequisite: A pass in MTH303 or Year 12 Mathematics Examination or equivalent  
Semester 1: Not offered Semester 2: Offered on face-to-face mode

This Unit offers modules in real numbers, measurements, ratios, proportions, algebra, and statistics. The first few modules are designed to equip students with essential mathematics skills required for a comprehensive appreciation of the remaining modules. In each module practical application(s) with the end of module exercise set is covered to reinforce the concepts learned through concrete applications, examples and contexts.

**PHY401 Mechanics, heat and waves**  
Prerequisite: A pass in Form 6 /Year 11 examination or equivalent  
Semester 1: Offered on face-to-face mode Semester 2: Not offered

This unit builds on the physics concepts learned in PHY301 and PHY302 or Year 12 Physics learned at secondary schools throughout the country. PHY401 Mechanics Heat and Waves is the first unit in Year 13 Physics and offered in semester 1. This unit is the prerequisite for PHY402 which is offered in semester 2. Students successfully completing both units would enable him or her to enrol in PHY501 a degree unit in the Bachelor course. The unit also provides a good foundation to do a Bachelor of Science degree majoring in Physics. Topics includes Physical Quantities, Units and Measurement, Scalar and Vector, Motion in 1-D,

Motion in 2-D, Dynamics, Laws of Motions, Force and equilibrium, Rotational equilibrium, Energy, Motion in a circle, Gravitational fields and laws, Temperature and the kinetic theory of gases and First law of thermodynamic.

**PHY402 Basics of electricity and magnetism**

Prerequisite: A pass in PHY401 or Year 12 Physics examination or equivalent

Semester 1: Not offered

Semester 2: Offered on face-to-face mode

This unit builds on the physics concepts studied in PHY301 and PHY302 or Year 12 Physics learned at secondary schools throughout the country. It is also built from PHY401- Mechanics Heat and Waves, which is done in semester 1. This unit is the continuation of unit PHY401 and if successfully completed should enable you to enrol in PHY501 and PHY502 degree units in the Bachelor programmes. The unit also provides a good foundation to do Bachelor of Science degree programmes majoring in Physics. Topics include D.C. Electricity, Electrostatics, Magnetism, Electromagnetic Induction, Atomic Physics, Nuclear Physics and Basic Electronic.

## HOW TO APPLY

There are 2 ways you can get the application forms:

1. Go to the SINU website [www.sinu.edu.sb](http://www.sinu.edu.sb) and download our application forms OR
2. You can collect a manual application form from the SINU SAS office at Kukum Campus, or visit the UPC office at Ranadi Campus and collect an application from the Executive Assistant Officer.
3. Fill out the application form and submit it with a certified copy of all documents indicated on the front page of the application.

## OUR CONTACT

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