Unit of Study: BUS 1003 Mathematics and Statistics
Trimester-3 2022

Overview:

Business maths are mathematics used by commercial enterprises to record and manage business operations. Commercial organizations use mathematics in accounting, inventory management, marketing, sales forecasting, and financial analysis. Mathematics typically used in commerce includes elementary arithmetic, elementary algebra, statistics and probability. Business management can be made more effective in some cases by the use of more advanced mathematics such as calculus, matrix algebra and linear programming. This subject will sharpen the mathematical skills of learners preparing to enter business employment.

Course(s)	Diploma of Business (DipBUS) Bachelor of Business (BBUS) Diploma of Business Information Systems (DipBIS) Bachelor of Business Information Systems (BBIS)
Credit Points	6 Credit points
Duration	12 weeks (10 teaching weeks; 1 study week; 1 final assessment week)
Level	Undergraduate Introductory
Student Workload	Students should expect to spend approximately 10 hours per week over 12 weeks (totalling approximately 120 hours) on learning activities for this unit.
Mode(s) of Delivery	On campus, Blended
Pre-Requisites	N/A
Unit Coordinator	As per current timetable
Contact Information	Consultation: 1 hour scheduled session

Unit Learning Outcomes (ULOs)

On successful completion of this unit, students will be able to:

ULO1: Perform basic mathematical computations in business related problems.
ULO2: Conduct break even analysis using both graphical and algebraic approaches.
ULO3: Perform quantitative data analyses and describe the process used.
ULO4: Formulate and test a hypothesis and describe the outcomes.

Weekly Schedule

Detailed information for each week's activities can be found in the unit's weekly modules in Canvas.

Week	Topic
Week 1	Introduction to Business Statistics and Sampling
Week 2	Graphical summaries of data
Week 3	Measures of Central Tendency
Week 4	Probability
Week 5	Discrete Probabilities Distribution
Week 6	The normal distribution
Week 7	Central Limit Theorem
Week 8	Confidence Intervals
Week 9	Hypothesis Testing
Week 10	Correlation and Regression
Week 11	STUDY WEEK
Week 12	ASSESSMENT/EXAMINATON WEEK FOR SPECIFIED UNITS

Assessments

1. All assessments are compulsory.
2. To pass the unit students must:
    - achieve a total of 50% or more of marks offered; and
    - pass all individual invigilated assessments; and
    - have attempted all assessments.

    Where one or more of these requirements are not met, the Board of Examiners will consider a student's overall progress towards meeting the unit learning outcomes and anyspecial circumstances before reaching a decision.
3. The Board of Examiners may grant a supplementary assessment where a student:
    - achieves a total of 45% or more; and
    - has passed all individual invigilated assessments in the unit; and
    - has attempted all assessments; and
    - has a recommendation for supplementary assessment by the Unit Coordinator andthe Head of Discipline.

    Where one or more of these requirements are not met, the Board of Examiners will consider a student's overall progress towards meeting the unit learning outcomes and anyspecial circumstances before reaching a decision. Attendance and engagement in class will be considered.
4. APIC awards common result grades as set out in the Award of Grade Policy.
5. Detailed information for each assessment can be found on the Unit's Home Page and inthe Assessment Brief.

Assessment Task	Type	Weight	Length	Due	ULO
Assessment 1: Log/Workbook This assessment task is a weekly recordingof the inside gained through tutorial exercises.	Individual  Invigilated 	50%	30 mins each task, (equiv. 3000 words)	Weeks 2, 4, 6, 8 and 10	[ULO1], [ULO2], [ULO3], [ULO4]
Assessment 2: Case study Students will be given a case study about social issues and critically analyse the casestudy based on the assignment requirements.	Individual 	20%	1000 Words	Week 6	[ULO1], [ULO2], [ULO3],
Assessment 3: Statistical Data Analysis Students will perform statistical data analysis based on a data set provided in thisassessment task. The data can be downloaded from Canvas under the Assessment 3 Task.	Group 	30%	1500 - 2000 Words	Week 12	[ULO1], [ULO2], [ULO3], [ULO4]

equiv. – equivalent word count based on the Assessment Load Equivalence Guide. It means this assessment is equivalent to the normally expected time requirement for a written submission containing the specified number of words.

Course Reserves

Course Reserve includes all required resources and reading material for the unit of study. You can access Course Reserve via APIC Library or via the Course Reserve link on the unit's homepage.

Prescribed text(s):

Navidi, W & Monk, B 2021, Essential statistics, 3rd edn, McGraw-Hill Education, London

Academic Integrity

Ethical conduct and academic integrity and honesty are fundamental to the mission of APIC and academic misconduct will not be tolerated by the College. It is the responsibility of every student to make sure that they understand what constitutes academic misconduct and to refrain from engaging in it. Please refer to APIC's Academic Integrity Policy for further details.

Other Important Information and Links

Special consideration If your academic work is impacted by significantdocumented illness, hardship, or other adverse circumstances beyond your control, you may make an application for Special Consideration. Please refer to the Assessment Policy for further details.	**Late submission** Penalties apply when work is submitted after the due date without approval. Please refer tothe Assessment Policy for information about late submission.
Assessment appeals If you are concerned about a mark you have received for an assessment or final grade, you may apply to formally appeal the grade. Pleasesee the Assessment Policy for further details.	**Award of grades** APIC awards common result grades, set out inthe Award of Grade Policy.
Expectations of student conduct Students are expected to conduct themselvesin a manner that is consistent with a safe and respectful study environment. More information can be found in the Student Codeof Conduct.	**Study resources** APIC Library and Student Learning Support resources and services can be accessed via theStudent Lounge or your Dashboard on the OLS(Canvas).
Student Services The Student Services team provides administrative support for students and handles enquiries about enrolment, timetables,important dates and submitting forms. More information can be found on the Student Services page on the OLS (Canvas).	**Key dates** Key dates through the academic year, includingteaching periods, census, payment deadlines and exams can be found on the Academic Calendar section of the APIC website.

Changes and Updates to the Unit of Study Guide

This Unit of Study Guide may be updated and amended from time to time. Students will be notified of any changes to the unit via the Online Learning System (Canvas) space for the unit.

This Unit of study Guide was last modified on September 21, 2022.