

HAWKER COLLEGE

A Community of Learning

Unit Outline - Semester 1 2019

Unit: 14107 Unit 1: Mathematical Applications (T) - 1

Course: 1352 MATHEMATICAL APPLICATIONS

Teacher: Steve Walker

Specific Unit Goals

- understand the concepts and techniques introduced in consumer arithmetic, algebra and matrices, and shape and measurement
- apply reasoning skills and solve practical problems arising in consumer arithmetic, algebra and matrices, and shape and measurement
- communicate their arguments and strategies, when solving problems, using appropriate mathematical language
- interpret mathematical information, and ascertain the reasonableness of their solutions to problems
- choose and use technology appropriately and efficiently

Unit Content

Topic 1 Percentages, Rates, Consumer Arithmetic

Topic 2 Algebra & matrices

Topic 3 Shape & measurement

Assessment

Information about moderation procedures, calculation of unit scores and course scores, attendance requirements, penalties for late or non-submission of work or for plagiarism, and procedures for appealing against a grade or score may be found on the Hawker College website (address below) or in the handout "Assessment Matters" (additional copies available from the Den).

http://www.hawker.act.edu.au/_data/assets/pdf_file/0020/269021/Assessment_Matters_@_Hawker.

Assessment Items

Assessment Item	Due Date Range		Weighting (%)
Test 1	27/03/2019	28/03/2019	30%
Investigations T1	04/02/2019	22/03/2018	20%
Test 2	20/06/2019	25/06/2019	30%
Investigations T2	01/04/2019	14/06/2019	20%

Completion of Assessment Items

Students are required to substantially complete and submit all assessment items that contribute to the assessment for a unit unless due cause and adequate documentary evidence is provided.

Exemption from an item and/or alternative assessment without penalty is available to students providing adequate documentary evidence.

Unless prior approval is granted, any student who fails to submit assessment tasks worth in total 70% or more of the assessment for the unit will be deemed to have voided the unit.

Attendance/Participation

It is expected that students will attend and participate in all scheduled classes/contact time/structured learning activities for the units in which they are enrolled, unless there is due cause and adequate documentary evidence is provided. Any student whose attendance falls below 90% of the scheduled classes/contact time or 90% participation in structured learning activities in a unit, without having due cause with adequate documentary evidence will be deemed to have voided the unit.

Grade Descriptors

	<i>A student who achieves the A grade typically,</i>	<i>A student who achieves the B grade typically,</i>	<i>A student who achieves the C grade typically,</i>	<i>A student who achieves the D grade typically,</i>	<i>A student who achieves the E grade typically,</i>
Knowledge	Demonstrates very high level of proficiency in the use of mathematical facts, techniques and formulae.	Demonstrates high level of proficiency in the use of mathematical facts, techniques and formulae.	Demonstrates some proficiency in the use of mathematical facts, techniques and formulae studied.	Demonstrates limited use of mathematical facts, techniques and formulae studied.	Demonstrates very limited use of mathematical facts, techniques and formulae studied
Application	Selects, extends and applies appropriate mathematical modelling and problem solving techniques.	Selects and applies appropriate mathematical modelling and problem solving techniques.	With direction, applies a mathematical model. Solves most problems.	Solves some mathematical problems independently.	Solves some mathematical problems with guidance.
Reasoning	Uses mathematical reasoning to develop logical arguments in support of conclusions, results and/or decisions; justifies procedures.	Uses mathematical reasoning to develop logical arguments in support of conclusions, results and/or decisions.	Uses some mathematical reasoning to develop logical arguments.	Uses some mathematical reasoning to develop simple logical arguments.	Uses limited reasoning to justify conclusions.
Communication	Is consistently accurate and appropriate in presentation of mathematical ideas in different contexts.	Is generally accurate and appropriate in presentation of mathematical ideas in different contexts.	Presents mathematical ideas in different contexts.	Presents some mathematical ideas.	Presents some mathematical ideas with guidance.