

**Unit Outline – Semester 2 2014**

**Unit:** 12763 Travel, Statistics and Trigonometry A (1.0)

**Course:** 1276 GENERAL MATHEMATICS

**Teacher/s:** Steve WALKER

**Specific Unit Goals**

The specific goals of this unit are:

* read and interpret maps and scale drawings
* plan, budget and organise an Australian driving holiday
* collect, display and interpret data
* apply statistics to real world situations
* find perimeters, areas and volumes of various shapes
* put the above knowledge to use in real situations
* use trigonometry to find lengths and angles for right angled triangles
* apply trigonometry
* apply knowledge of measurement to real life situations
* apply trigonometry to real life situations

### Content

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| --- | --- |
| **Content/Topic** | **Weeks** |
| **Travel in Australia**  Maps, compass directions, scale drawing, holiday/tour organisation and costs | 1 – 3 |
| **Application Of Statistics**  Collecting, organising and displaying data, statistical measures, random sample, census, predictions, poverty/education statistics | 4 - 8 |
| **Applied Measurement**  Perimeter, area, volume, capacity, renovations and house plans, gardens | 9 - 13 |
| **Trigonometry**  Sine, cosine and tangent ratios, finding angles and lengths, applications | 13 -16 |

**Assessment Matters**

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 at <http://www.hawkerc.act.edu.au/__data/assets/pdf_file/0010/158059/hc_assessment_matters2009.pdf>,

or in the handout “Assessment Matters” (additional copies available from the Den).

**Assessment Items**

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| --- | --- | --- | --- |
| **Assessment Item** | **Due Date Range** | | **Weighting %** |
| Travel Assignment – in class/take home | 18/08/2014 | 22/08/2014 | 25% |
| Test 1 | 08/09/2014 | 12/09/2014 | 25% |
| Investigation/Practical works | 21/07/2014 | 14/11/2014 | 25% |
| Test 2 | 16/11/2015 | 16/11/2015 | 25% |

**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**

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| --- | --- | --- | --- |
|  | **Knowledge** | **Application** | **Communication** |
| A student who achieves the grade **A** | Demonstrates a very high level of proficiency in the use of facts, techniques and formulae. | Selects and applies appropriate techniques to solve practical problems. | Is consistently accurate and appropriate in presentation of mathematical ideas. |
| A student who achieves the grade **B** | Demonstrates a high level of proficiency in the use of facts, techniques and formulae. | Selects and generally applies appropriate techniques to solve practical problems. | Is generally accurate and appropriate in presentation of mathematical ideas. |
| A student who achieves the grade **C** | Demonstrates some proficiency in the use of facts, techniques and formulae. | With direction, selects and applies techniques to solve practical problems. | Presents some mathematical ideas. |
| A student who achieves the grade **D** | Demonstrates limited use of facts, techniques and formulae. | Solves some practical problems. | Presents some mathematical ideas with guidance. |
| A student who achieves the grade **E** | Demonstrates very limited use of facts, techniques and formulae. | With guidance, solves some practical problems. | Presents some mathematical ideas with guidance. |