PRACTICAL MATHEMATICS

900115

2018

UNIT OUTLINE
### Unit name
Practical Mathematics

### Unit number
900115

### Coordinator
Michael Casey

### Session
2018.2

### Handbook summary
This unit has been designed to develop the students' mathematical literacy and mathematical thinking necessary for further education, work and everyday life. The unit aims to build on existing skills, develop skills in new areas and encourage students' confidence in their own ability by presenting mathematical concepts within a series of real-life problems.

### Credit point value
10

### Prerequisite/s
N/A

### Corequisite/s
N/A

### Unit incompatible with and not to be counted for credit with
N/A

### Assumed knowledge
Year 9 Mathematics or equivalent

### Unit level
Level Z — Non-award Foundation unit

### Attendance requirements
Students are expected to attend at least 80% of classes. Educational research consistently demonstrates that this attendance level is associated with a high likelihood of achieving a passing grade.

### Enrolment restrictions
Students must be enrolled in University Foundation Studies Extended three-term course.

### Learning outcomes
On successful completion of this unit, students should be able to:
1. demonstrate an understanding and proficiency in using the mathematical language and terminology presented in the unit
2. translate real-life problems into mathematical language
3. select and apply a variety of problem-solving strategies and techniques to solve familiar and unfamiliar real-life problems, and
4. use appropriate techniques to assess validity of solutions and interpret results.

### Unit content
In this unit students will learn about:
- problem solving
- the real number system
• basic arithmetic
• basic algebra
• tables and graphs
• measurements and geometry
• trigonometry, and
• basic probability.

**Mode of delivery**

This unit consists of six hours of face-to-face teaching each week. In addition, students will be required to access vUWS regularly in order to download additional learning material and to check for any announcements about the unit that may be posted there.

**Online learning requirements**

**Essential requirements**

**Essential texts**

N/A

**Further resources**


**Essential equipment**

• Non-programmable scientific calculator (see learning guide for a list of approved calculators)
ASSESSMENT ITEMS AND WEIGHTING

Assessment for this unit will be based on the following components:

<table>
<thead>
<tr>
<th>Task</th>
<th>Weighting</th>
<th>Learning outcomes assessed</th>
<th>Mandatory task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Class test 1 (1 hour)</td>
<td>10%</td>
<td>1, 2, 3, 4</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Class test 2 (1 hour)</td>
<td>25%</td>
<td>1, 2, 3, 4</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Class test 3 (1 hour)</td>
<td>25%</td>
<td>1, 2, 3, 4</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Final examination (2 hours)</td>
<td>40%</td>
<td>1, 2, 3, 4</td>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
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</tbody>
</table>

For details of assessment due dates, please refer to the learning guide for this unit.

All marks will be determined in accordance with The College Assessment Policy.

All assessment tasks are mandatory unless otherwise specified. Should a student fail to attempt/submit the first formal assessment task in a unit, they will be deemed to be at risk and will need to follow an intervention plan in order not to receive a Fail Non-Submission (FNS) grade. However, failure to attempt/submit all other mandatory assessment tasks will result in an immediate FNS grade for the unit.

An overall mark of at least 50% is required to pass the unit.