The University of Southern Queensland

Course Specification

Description: Mathematics Tertiary Preparation

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-Nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
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<tbody>
<tr>
<td>MTS</td>
<td>7001</td>
<td>20063</td>
<td>1, 2003</td>
<td>ONC</td>
<td>1.00</td>
<td>TWMBE</td>
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Academic Group: KUMBN
Academic Org: KUMBNL
HECS Band: 2
ASCED Code: 010101

STAFFING
Examiner: Nura Behjat
Moderator: Phillip Dreise

RATIONALE
Students entering tertiary study require an opportunity to master and hence be confident with basic mathematics. This course will provide students with the basic mathematical competencies for tertiary studies in Bachelor of Education, Bachelor of Nursing (Pre-Registration) and Bachelor of Science (Psychology).

SYNOPSIS
Using concepts of self-paced instruction the course guides students through a carefully sequenced series of topics, which will provide the foundation for mathematics that will be encountered in tertiary studies, detailed above. The self-paced structure allows students to work at their own pace developing confidence with mathematics and general problem solving.

OBJECTIVES
On successful completion of this course students will be able to:

- demonstrate an understanding of a number of mathematical topics essential for tertiary study;
- interpret and solve a range of problems involving mathematical concepts relevant to this course;
- demonstrate the skills necessary to extend mathematical knowledge into everyday life and other studies.
TOPICS

Description Weighting (%)  
1. Managing mathematics 12.50  
2. More than just numbers 12.50  
3. The power of numbers 12.50  
4. Comparing numbers 12.50  
5. Representing relationships 12.50  
6. Dealing with data 12.50  
7. Generalising numbers - algebra 12.50  
8. Generalising numbers - graphs 12.50

TEXT and MATERIALS required to be PURCHASED or ACCESSED:
Books can be ordered by fax or telephone. For costs and further details use the 'Book Search' facility at http://bookshop.usq.edu.au by entering the author or title of the text. Scientific calculator (the use of a Casio is demonstrated in the study materials)

REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Scientific calculator Casio FX 82TL  
de Klerk, Judith 1999, Illustrated Maths Dictionary for Australian Students, 3rd edition, OPACS 2001, Mastering the Calculator, USQ, Toowoomba. (This text is available for purchase from Kumbari/Ngurpai Lag.)

STUDENT WORKLOAD REQUIREMENTS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Assessment</td>
<td>40</td>
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<tr>
<td>Directed Study</td>
<td>45</td>
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<tr>
<td>Private Study</td>
<td>75</td>
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## ASSESSMENT DETAILS

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks Out of</th>
<th>Wtg(%)</th>
<th>Required</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>15.00</td>
<td>3.00</td>
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<td>60.00</td>
<td>11.00</td>
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<td>ASSIGNMENT 4</td>
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<td>16.00</td>
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<td>LEARNING DIARIES</td>
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<td>55.00</td>
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</table>

**NOTES:**
- Students will be advised of the official examination date after timetable has been finalised.

## OTHER REQUIREMENTS

1. Normally, to gain a passing grade, students must submit ALL assignments and obtain a satisfactory result in each assessment item. Students will be asked to re-submit an assignment if they did not complete it to a satisfactory standard and according the marking criteria.