Assessment Notifications

Faculty: Mathematics  Course: Mathematics Standard 2  Year: 12

Assessment Task: 2

Assessment Weighting: 30%  Due: Term 1  Week 9  Date: 25/3/2019

Task Type: Hand in Task ☑  In Class Task ☐  Practical Task ☐

Outcomes assessed (NESA)
MS2-12-8, MS2-12-9, MS2-12-10

Task Description/Overview
This assignment involves the use of network theory to solve a real world problem. All parts of the task are to be completed individually. When working during class time, students can access all class notes, the class textbook and practise questions. Students may also access digital technologies during class time. Two double periods (a total of 4 periods) will be allocated to assist in completing this task.

Detailed Assessment Task Description
An assignment handout is attached to this notification, outlining 6 parts of the assignment to complete. You will be assessed on how well you:
- accurately solve a variety of problems based on the scenario
- select and use appropriate mathematical process, technologies and language to investigate, organise and interpret networks
- provide reasoning and justification related to the problems

Assessment Criteria

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Mark Range</th>
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| Outstanding (O) | ☐ demonstrates a thorough understanding of the mathematics involved in solving the problem  
☐ uses appropriate mathematical processes in solving the problem without error  
☐ communicates in a concise and systematic manner and justifies conclusions using appropriate mathematical language, diagrams, notation and symbols | 26 - 30 |
| High (H) | ☐ demonstrates a high understanding of the mathematics involved with appropriate calculations with either a minor arithmetic or calculation error OR all mathematical calculations have been carried out without error but the final conclusion is incorrect  
☐ communicates in a concise and systematic manner and justifies conclusions using some mathematical language, diagrams, notation and symbols | 19 - 25 |
<table>
<thead>
<tr>
<th>Levels</th>
<th>Description</th>
<th>Score</th>
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<tbody>
<tr>
<td><strong>Sound (S)</strong></td>
<td>□ demonstrates understanding of the mathematics involved with appropriate calculations with either arithmetic or calculation error OR most mathematical calculations have been carried out without error and the final conclusion is incorrect □ communicates in a concise and systematic manner and justifies conclusions using some mathematical language, diagrams, notation and symbols</td>
<td>13 - 18</td>
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<td><strong>Basic (B)</strong></td>
<td>□ demonstrates progress towards a solution with some error □ demonstrates a limited understanding of what it means to work mathematically with some use of mathematical language, diagrams, notation and symbols</td>
<td>6 - 12</td>
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<tr>
<td><strong>Limited (L)</strong></td>
<td>□ demonstrates a limited understanding of the mathematics involved in solving the problem □ limited use of mathematical language or diagrams</td>
<td>0 - 5</td>
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**Satisfactory completion of courses**

A course has been satisfactorily completed, when the student has:

- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes