AMTH 142 — Scientific Computing I

Unit Information

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1 Unit Coordinator

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2 How the Unit will be Run

The very first thing you should do if you are taking this unit is mail a message to

    amth142@turing.une.edu.au

from the computer account where you wish to receive electronic announcements. Perhaps saying something like: Yes please, put me on the mailing list.

The next thing you should do is check out the ~amth142 web page.

    http://mcs.une.edu.au/~amth142/

This is where everything that happens in this unit will take place. The web page is structured in the following fashion.

Lectures: This is where the lecture notes will appear.
Practicals: This is where the practicals will appear.
Assignments: This is where assignments will appear.

Remember that the most important announcements will be made via the mailing list. If you want to be on it, then you must request it (as mentioned in the very first sentence of this section).
3 Unit Outline

This unit is an introduction to computing techniques and mathematical modelling. Topics covered will include:

1. Using Latex
2. Using Maxima
3. Using Scilab
4. Matrices and Linear Equations
5. Random Numbers and Simulation
6. Numerical Methods

4 Prescribed Software

The software used in this unit is Latex, Scilab and Maxima. A CD containing this software will be sent to all students.

5 Assessment

Assessment is by assignments, there is no exam.
The following is a tentative list of Assignment Topics and Due Dates:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Mark</th>
<th>Due Date</th>
</tr>
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<tbody>
<tr>
<td>1 Latex</td>
<td>2%</td>
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</tr>
<tr>
<td>2 Latex</td>
<td>19%</td>
<td>13th August</td>
</tr>
<tr>
<td>3 Latex</td>
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</tr>
<tr>
<td>4 Maxima</td>
<td>19%</td>
<td>27th August</td>
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<tr>
<td>5 Scilab, Linear Equations</td>
<td>19%</td>
<td>10th September</td>
</tr>
<tr>
<td>6 Random Numbers</td>
<td>19%</td>
<td>2nd October</td>
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<tr>
<td>7 Numerical Methods</td>
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<td>15th October</td>
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