Year 9 Australian Curriculum Mathematics – Core  

Teacher: Rezaul Mridha

Course Description
This mathematical course aims to promote a positive attitude to mathematics and its relevance as well as a sound understanding of mathematics and its processes. Topics covered include: real numbers, patterns and algebra, measurement, and linear and non-linear relationships.

Learning Outcomes
- Apply index laws to numerical expressions
- Apply index laws to algebraic expressions
- Express numbers in scientific notation
- Expand algebraic expressions and collect like terms
- Find the distance between two points, mid point and gradient of a line segment
- Sketch linear graphs using co-ordinates of two points and sketch non-linear relationships
- Investigate Pythagoras’ Theorem and its application to solving problems involving right-angled triangles
- Use transformations and conditions to explain similarity and congruency of triangles
- Solve problems using ratio and scale factors in similar figures

Work Practice Outcomes
- Cooperates with teacher and other students
- Exhibits a self-disciplined approach to work
- Completes set homework
- Completes set class work

Materials Required
- Calculator, writing materials (pens, pencils etc), ruler, eraser and an exercise book

Typical Homework
Homework will be set on: <www.mymathsonline.com.au>
All students will have their own unique logon and password to access specific tasks. Students who have difficulty accessing the internet may use the computers in the library, or attend tutorials every Thursday at long break. Homework may also include topic investigations as well as completion and revision of classwork.

<table>
<thead>
<tr>
<th>Assessment Items</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common test</td>
<td>Week 6</td>
</tr>
<tr>
<td>Common test</td>
<td>Week 10</td>
</tr>
<tr>
<td>In Class assessment</td>
<td>Week 15</td>
</tr>
<tr>
<td>In Class assessment</td>
<td>Week 18</td>
</tr>
<tr>
<td>Homework</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>