### MOSSMAN STATE HIGH SCHOOL

#### Year 10 MATHEMATICS A PREP

Semester 2, 2017 – Course Outline  MAP102A Ms Allery

<table>
<thead>
<tr>
<th>Unit Name</th>
<th>Main Ideas</th>
<th>Duration (weeks)</th>
<th>Assessment Item</th>
<th>Due Date</th>
</tr>
</thead>
</table>
| **Topic 5**  
Chance, Data & Statistics | • Frequency tables, Histograms, Mean, Median & Mode  
• Pie Graphs  
• Interquartile Range, 5 Number summary, Box Plots, Parallel Box Plots  
• Surveys  
• Analysis of data | 4 weeks | EMT (Assignment)  
2.5 weeks | **Thursday 3 Aug** |
| **Topic 6**  
Chance & Data – Probability | • Long run proportion  
• Estimating probability  
• Theoretical probability  
• Venn diagrams  
• Addition law of probability  
• Two-way tables  
• Tree diagrams  
• Independent events | 3 weeks | **EXAMS**  
KAPS Exam  
70mins unseen  
MAPS Exam  
70mins unseen | **Wednesday 30 Aug**  
**Thursday 31 Aug** |
| **Topic 7**  
Space, Earth Geometry | • Great circles & distances  
• Australian & world time zones | 3 weeks | **EXAMS**  
KAPS Exam  
70mins unseen  
MAPS Exam  
70mins unseen | **Wednesday 15 Nov**  
**Thursday 16 Nov** |
| **Topic 8**  
Number – Budgeting, simple Interest, Compound Interest | • Solve problems that involve rates, ratios and direct and inverse proportions.  
• Budgeting  
• Borrowing, consumer credit, investments  
• Assets, savings, expenditure and methods of payment.  
• Influence of schedules of government and business charges. | 5 weeks | **EXAMS**  
KAPS Exam  
70mins unseen  
MAPS Exam  
70mins unseen | **Wednesday 15 Nov**  
**Thursday 16 Nov** |

### Literacy Components
- Speaking and Listening
- Reading & Viewing
- Writing & Designing

### Numeracy Components
- Number
- Algebra
- Measurement
- Space
- Chance & Data

### ICT/Technology Components
- Select and use ICTs in the processes of inquiry and research
- Select and use ICTs to create a range of responses to suit the purpose and audience
- Select and use ICTs to collaborate and enhance communication for an identified purpose and audience
- Develop and apply ethical, safe and responsible practices when working with ICTs
- Use a range of advanced ICT functions and applications