

**Assessment outline: Mathematics Specialist 3 & 4: 2024 –**

**Note: This outline and assessment dates are subject to change!**

**Times of assessments may vary with notice.**

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|  | **ASSESSMENT** | **TIME** | **WEIGHTING** |
| **Investigations**  **20%** |
| **1: Complex numbers** (Factorisation of polynomials)  3.1.1 – 3.1.7  3.1.13 – 3.1.15 | **Wk.6 (T1) 2023**  **Thurs p1** | 10% |
| **2: Integral Calculus**  4.1.5-4.1.7  Volumes of revolution | **Wk.11 (T2) 2023**  **Thurs p1** | 10% |
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| **Response**  **40%** | **Test 1: Complex No.**  **Cartesian forms**  **Complex arithmetic using polar form**  **The complex plane (The Argand plane)**  **Roots of complex numbers**  **Factorisation of polynomials**  3.1.1 – 3.1.15 | **Wk.3 (T1) 2023**  **In class thurs/Fri** | 13% |
| **2: Functions**  **Functions**  **Sketching graphs**  **The algebra of vectors in three dimensions**  **Vector and Cartesian equations**  3.2.1 – 3.2.8  3.3.1-3.3.4 | **Wk.9 (T1) 2023**  **Tues in class** | 13% |
| **3: Vectors**  **Systems of linear equations**  **Vector calculus**  **Integration techniques**  **Applications of differentiation**  4.1.1 – 4.1.7  3.3.1 – 3.3.15  Integration techniques & applications  **Integration**  **Separation of variables, Modelling motion**  **Applications of integral calculus**  4.2.1 – 4.2.7  Sample Means  4.3.1 – 4.3.3 | **Wk.5 (T3) 2023**  **Fri p1** | 14% |
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| **Exams**  **40%** | **Semester One Exam**  **Topic 3.1: Complex numbers**  **Topic 3.2: Functions and sketching graphs**  **Topic 3.3: Vectors in three dimensions**  Unit 3 | **Wk.5-6 (T2)** | 18% |
| **Semester Two Exam**  **Topic 4.1: Integration and applications of integration**  **Topic 4.2: Rates of change and differential equations**  **Topic 4.3: Statistical inference**  Units 3 & 4 | **Wk.9-10 (T3)** | 22% |
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|  |  | **TOTAL** | 100% |
| **Parent and Student Declaration:**  **I have read the above assessment schedule and understand the requirements of the course.**  **Student’s Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_**  **Parent’s Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_** | | | |