

## Statistics Curriculum Intent and Overview

To develop the next generation of statisticians to be able to collect, analyse, interpret and present data and make sense of data in the real world.

Focus	Intent
Understanding	To develop understanding of the statistical enquiry cycle: collecting, interpreting, analysing and presenting data and how this, along with quality assurance, retail price index and making predictions impacts industry and economics.
Enquiry	To analyse and challenge the reliability of data in real life and in the media such as government statistics.
Embedding knowledge	To develop retrieval skills to embed cumulative knowledge.
Progress Tracking	To closely monitor and track student progress to ensure every student makes at least expected progress.
Academic Achievement	To continuously improve on the examination success for all our students.
Inspiration	To inspire the next generation of statisticians to be able to understand and challenge data in every-day life, in the media and in life beyond De La Salle School

	Autumn Term	Spring Term	Summer Term
Year 10	Collection of Data <ul style="list-style-type: none"> <li>● Primary and Secondary Data</li> <li>● Populations</li> <li>● Petersen Capture-Recapture Formula</li> <li>● Random Sampling</li> <li>● Non-Random Sampling</li> <li>● Stratified Sampling</li> <li>● Questionnaires and Interviews</li> <li>● Controlling Extraneous Variables</li> <li>● Designing Investigations</li> </ul>	Processing and Representing Data <ul style="list-style-type: none"> <li>● Two-way Tables</li> <li>● Stem and Leaf Diagrams</li> <li>● Pie Charts</li> <li>● Population Pyramids</li> <li>● Choropleth Maps</li> <li>● Histograms</li> <li>● Cumulative Frequency Charts</li> <li>● The Shape of a Distribution</li> <li>● Histograms</li> </ul>	Summarising Data <ul style="list-style-type: none"> <li>● Averages</li> <li>● Transforming Data</li> <li>● Geometric Mean</li> <li>● Weighted Mean</li> <li>● Measures of Dispersion</li> <li>● Standard Deviation</li> <li>● Box Plots and Outliers</li> <li>● Skewness</li> <li>● Comparing Data Sets</li> <li>● Making Estimates</li> <li>● Scatter Diagrams, Correlation and Time Series</li> <li>● Spearman's Rank Correlation Coefficient</li> <li>● Pearson's Product Moment Correlation Coefficient</li> <li>● Moving Averages</li> </ul>
Year 11	<ul style="list-style-type: none"> <li>● Probability and Index Numbers</li> <li>● Venn Diagrams</li> <li>● Tree Diagrams</li> <li>● Index Numbers</li> </ul>	<ul style="list-style-type: none"> <li>● Rates of Change</li> <li>● Binomial and Normal Distribution</li> <li>● Standardised Scores</li> </ul>	<ul style="list-style-type: none"> <li>● Quality Assurance and Control Charts</li> <li>● Preparation for Exams</li> </ul>