Statistics and Probability Unit Overview
(Scheduled in *tan*, changes from original in **red**)

Day	Date	Sec	HW Problems	Topics
1	11/29	14A	Opening problem, 3,4	Vocabulary, histograms, frequency tables, stem and leaf
		14B.1	3,5,8,9,11,12,14,15,16	Mean, median, mode, skew, outlier, bimodal
2	12/1	14B.2	2,4,5,7,8,10	Cumulative frequency, summarized data $\dfrac{\sum fx}{\sum f}$
		14B.3	2,3	Use midpoint of range for data in ranges (classes)
		14C.1	2,4,5	Range, quartiles, IQR
		14C.2	2,3,6	Box & Whisker
3	12/2	14D	1-7 Odd	Cumulative frequency graphs, percentiles
		14E	1,2,3	Using technology – programming
4	12/6	14F.1	1,3,5-9	Variance, standard deviation. Do #1 by hand, can use calculator for others.
		14F.2	2	Sample vs. population, statistics vs. parameters. Difference between μ and $\bar{x}$, σ and s_n.
		14F.3	3,4,5	Grouped data
		14G	1,3,4	Standard deviation and the Normal Distribution
5	12/8		Review (IB Problems)	SD & 14G if necessary
6	12/9		**Stats Unit Test**	Last day before winter break ([MarkScheme](#))
	-	Gen	Calculator programs	Calculating 5 number summary using lists with groups!
	1/3	15A	Opener problem, 1-4	Vocabulary, experimental probability
	1/3			**Investigation (Pigs, Dice, multiple coins)**
	1/3	15.B	1-3	Sample space, Tree diagram
	1/3	15C.1	1,3,5,6,7	Theoretical probability, complementary events, lead in to combinations and permutations, connection to Punnett Squares
	1/3	15C.2	1-3	Using grid diagrams
	1/5	15D	1-3	Tables of outcomes
	1/5	15E.1	1-6 & supplement	Compound events, independent events
	1/5	15E.2	1-4 & supplement	Dependent events
	1/6	15F	1-6	Tree diagrams
	1/6	15G	1-9 & supplement	Sampling with and without replacement
	1/10	15H	1-9	Binomial probabilities (Binomial expansion – Chapter 7)
	1/12	15I.1	1-9	Set notation
	1/12	15I.2	1-3	Venn diagrams
	1/12	15J	1-11	Laws of probability, conditional probability
	1/13	QB	4,7,9,10,11,12,14	15J continued
	1/17	15K	1-8	Independent events
	1/17	QB	13,15	Finish them up (independence)
	1/19	Review	Set A, B, C, D	3 problems from each section. Choose the ones that challenge you.
	1/20	Review	Set A, B, C, D	3 problems from each section. Choose the ones that challenge you.
	1/24	Quiz		
	1/24	23A	1-4	Discrete vs. random, variable notation
	1/26	23B	1-11	Discrete distributions
	1/27	23C	**1-14 all**	Expectation
		23D	1-7	Binomial distribution - calculator
		24A	1-5	Continuous Probability Density Functions
		24B.1	1-9	Normal distribution
		24B.2	1-3	Probabilities using calculator
		24C.1	1-6	Standard Normal Distribution (Z) – using tables
		24C.2	1-3	Standardizing any normal distribution
		24D	1-4	Quantiles & k-Values – using inverse tables
		24E	1-9 plus QB!	Applications of Normal Distribution
			Review	Review
			Unit Test	