

# *Norwood Public Schools*

## *Curriculum Overview*

### *AP Statistics 270*

#### **Description**

Advanced Placement Statistics is a rigorous mathematics course taught at the advanced placement level at Norwood High School. It is the equivalent of a one semester, 3 credit university-level Statistics course such as Stat 101. AP Statistics is not calculus based and quite different from calculus and pre-calculus. In fact many students take AP Statistics simultaneously with another math class. The pre-requisite course for AP Statistics is Algebra 2. Both juniors and seniors who have passed Algebra 2 and who have demonstrated aptitude in mathematics courses are eligible and encouraged to take this course. AP Statistics is divided into four main units; Exploring Data, Producing Data, Probability, and Inference Procedures.

#### **Learning Experiences:**

Students will investigate data. Data sets will be constructed, presented, and examined through visual displays and numerical summaries. Students will reason and communicate findings, make conjectures, analyze results, and formulate and justify conclusions. The TI-83/84 calculators and other technologies such as spreadsheet programs will be used throughout the course to help with calculations and inference procedures. Students are required to complete a project each term in addition to and supplementing the curriculum. A major focus of this course is preparation for the nationwide Advanced Placement Statistics exam given in May.

#### **Content Outline:**

	Chapter	Name
Term 1	1	Exploring Data
	2	The Normal Distributions
	3	Examining Relationships
	4	More on Two-Variable Data
Term 2	5	Producing Data
	6	Probability
	7	Random Variables
Term 3	8	The Binomial and Geometric Distributions
	9	Sampling Distributions
	10	Introduction to Inference
	11	Inference for Distributions
Term 4	12	Inference for Proportions
	13	Inference for Tables
	14	Inference for Regression

#### **Resources Used:**

Textbook: The Practice of Statistics, Yates, Moore, McCabe, 1999, W.H. Freeman and Company  
ISBN: 0-7167-3370-6, TI-83/84 graphing calculator and software, Excel spreadsheets, Minitab output