Southside High School
An International Baccalaureate High School
6630 Frontage @ White Horse Rd--Greenville, 29605 SC-- 864-355-8700
"Creating a Common School Culture of Excellence" Fax 864-355-8798

Course Syllabus

School Year: 2012-2013
Instructor: Mr. Rogers
Course: AP Statistics
Room #: 134, 105
Phone: 877-8737
Email address: tkrogers@greenville.k12.sc.us
After school Extra-Help (Days/Time): Tue.,Thurs. and Friday after school

General Course Description and Objectives:

AP Statistics is a college level class for students who have been highly successful in Algebra II. It covers the topics needed for the American College Board AP Statistics exam. Students passing this test may receive college credit.

Course Outline

I. Unit Title: Distributions
Begin and End Dates: 08 -22, 09 - 27
Chapters: 1

Specific Outcomes (Objectives/Standards):
I. Exploring Data: Describing patterns and departures from patterns

Unit Assessment: Test

II. Unit Title: Normal Distribution
Begin and End Dates: 08 – 28, 09 - 07
Chapters: 2

Specific Outcomes (Objectives/Standards)
The normal distribution

Unit Assessment: Test

III. Unit Title: Regression Analysis
Begin and End Dates: 09 – 08, 09 - 21
Chapters: 3

Specific Outcomes (Objectives/Standards)
Exploring bivariate data

Unit Assessment: Test

IV. Unit Title: Nonlinear Regression
Begin and End Dates: 09 – 22, 09 - 30
Chapters: Transformations to achieve linearity: logarithmic and power transformations

Specific Outcomes (Objectives/Standards)
Transformations to achieve linearity: logarithmic and power transformations

Unit Assessment: Test

V. Unit Title: Producing Data
Begin and End Dates: 10 – 01, 10 - 12
Chapters: 5

Specific Outcomes (Objectives/Standards)
II. Sampling and Experimentation: Planning and conducting a study

Unit Assessment: Test

VI. Unit Title: Probability
Begin and End Dates: 10 – 13, 10 - 28
Chapters: 6

Specific Outcomes (Objectives/Standards)
Probability basics

Unit Assessment: Test

VII. Unit Title: Binomial & Geometric Distributions

Begin and End Dates: 11 – 02, 11 - 13
Chapters: 7 & 8

Specific Outcomes (Objectives/Standards)
Discrete random variables and their probability distributions, including binomial and geometric

Unit Assessment: Test

VIII. Unit Title: Sampling Distributions Confidence Intervals
Begin and End Dates: 02 – 03, 02 - 18
Chapters: 9 & 10a

Specific Outcomes (Objectives/Standards)
Estimating population parameters and margins of error

Unit Assessment: Test

IX. Unit Title: Chi Square Test
Begin and End Dates: 01 – 22, 02 - 28
Chapters: 13

Specific Outcomes (Objectives/Standards)
Chi-square test for goodness of fit, homogeneity of proportions, and independence

Unit Assessment: Test

X. Unit Title: Regression
Begin and End Dates: 01 – 29, 02 - 12
Chapters: 14

Specific Outcomes (Objectives/Standards)
Test for the slope of a least-squares regression line

Unit Assessment: Test

XI. Unit Title: Special Projects
Begin and End Dates: 02 – 15, 05 - 03
Chapters: Mr. R's web site

Specific Outcomes (Objectives/Standards)
Explore applications of statistics.

Unit Assessment: Special Projects

XII. Unit Title: Review for AP Exam
Begin and End Dates: 02 – 15, 05 - 03

Chapters: All

Text:

The Practice of Statistics 2nd Edition TI-83 Graphing Calculator Enhanced (Hardcover)
by Daniel S. Yates, David S. Moore, Daren S. Starnes

Materials Needed:

1. **A USB thumb drive** or other storage media for maintaining your electronic portfolio of physics assignments. We will attempt to be as close to a paperless classroom as possible.
2. **A set of dry erase markers**. You will frequently be working problems in class on a white board.
3. **A package of 3x5 cards:** Starting immediately, each student will, over the course of the year create a set of flash cards to use as a study aid.
4. **A graphing calculator**

Grading Policy and Assessments:

A = 93-100
B = 85-92
C = 77-84
D = 70-76
F = 0-69

Quarter:
Major Assessments:
Minor Assessments:
Minor assessments will consist of: Tests and major projects

Major assessments will consist of: Homework, participation, labs, minor projects

Attendance Policy:

School Policy: a student may not miss more than ten days from a year-long course. Those ten days include parent's notes, suspensions, unexcused absences, administrative, or late arrival notes. After ten absences, a doctor's note or administrative excuse must be provided or the student will not receive credit for the course.

What to do if you miss a class:

Excused Absence: Quizzes cannot be made up but will not count against a student with an excused absence. If you have an excused absence, you will be able to make up all other work. Provision for make-up work is the student's responsibility and must be done outside of class within five (5) consecutive school days after the student returns to school.

Unexcused Absence: Make up work and tests for unexcused absences will not be accepted.

Academic and Behavioral Expectation

1.If Mr. Rogers, a guest speaker, or a substitute is addressing the class or a test is in progress, students should be silent. Otherwise, students may discuss class related information in low level voices. The noise level should never rise to the point that it is hard to hear.
2.Remain seated except with teacher permission.
3.Come to class prepared and use your class time for learning the subject.
4.All equipment in the classroom is off limits except with teacher permission.
5.Commit yourself to passing the AP Exam.
6.Be respectful to others at all times, especially to guests and visitors.