SDC STATISTICS COURSE SYLLABUS

Course Name and Number	SDC Probability and Statistics
Semester and Year	FALL 2025
Instructor Name	David Caughran
Office Location	CCHS M121
Office Hours	3:15 – 3:45 pm M-F
Phone	423-623-8718 ext 115
Email	caughrand@cocke.k12.tn.us

Catalog Course Description	An introduction to probability and statistics without calculus including descriptive statistics, probability distributions, the normal distribution, testing hypotheses, the t-test, and estimates and sample sizes.
Prerequisites	Two years of high school algebra
Required Text	Introductory Statistics Openstax.org
Required Materials	TI-84 graphing calculator required for course – Discuss with instructor if you own a different graphing calculator
websites/apps for this course, list the apps and the platform	Myopenmath.com For students to enroll in this course via direct login, you will need to provide them two things: 1. The course ID: 282595 2. The enrollment key: fall_25
General Education Course Designation	Yes

Course Outcomes

1. Organize and summarize data using frequency distributions, histograms, and descriptions of central tendency and variation.
2. Compute the population mean, variance, and standard deviation given a discrete probability distribution and compute probabilities for applied problems using the binomial distribution.
3. Compute probabilities including the use of the addition rule, the multiplication rule, conditional probabilities, and counting techniques.
4. For applied problems, compute probabilities using the normal distribution and the central limit theorem and find percentile scores using normal distributions.
5. Make inferences about population means and proportions from sample data using confidence intervals. Determine sample sizes required to estimate means.
6. Make scatterplots of paired data, analyze the data using linear regression and correlation, and make predictions.
7. Test claims about population means using hypothesis testing.
8. Use computer programs and/or a graphing calculator to perform statistical analysis.

Instructional and Evaluation Methods:

9 weeks grade calculations:

Homework counts 25%

Quiz Average counts 25%

Exam Average counts 50%

9 week Avg. = 0.50 (Exam Avg.) + .25(HW Avg.)+0.25(Quiz Avg.)

Testing Procedures:

Quizzes will be given throughout the semester. There will be end of chapter in-class exams and a comprehensive final exam.

Semester Test: The Semester Test will be given according to the CCHS schedule posted.

SDC Statistics Challenge Exam given according to state schedule.

Grading Scale:

A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

Assignments/Projects: Will be given on a per class basis.

Class Participation: It is expected that each student participant in classroom discussion, work and classroom exercises. Students will be evaluated on their class participation.

Other Requirements: Program Specific Policies

HOMEWORK:

Homework will be due on the assigned date. Homework will be accepted one week late with a 10 point penalty. Homework turned in later will receive a grade of zero.

QUIZZES:

Quizzes will be given throughout the semester, some of which are in-class quizzes and others to work at home. A missed in-class quiz due to an absence will receive a score of zero until made up.

EXAMS:

There will be end of chapter in-class exams and a comprehensive final exam. There is also a SDC Statistics Challenge Exam for college credit which will be administered near the end of the semester.

ATTENDANCE:

Regular attendance is mandatory for your success in this course. Students will receive homework assignments each class meeting. Students are expected to do the assignments in preparation for discussion during the next class meeting.