Rapid City
Central High School

AP Statistics

Course Description: The purpose of the AP course in Statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes—Exploring Data: describing patterns and departures from patterns; Sampling and Experimentation: planning and conducting a study; Anticipating Patterns: exploring random phenomena using probability and simulation; and Statistical Inference: estimating population parameters and testing hypotheses. Students who enroll in this course will be prepared to take the AP Statistics exam in May.

Attendance: Students are required to be in school every day. Students are responsible for communicating with their teachers to make up missed learning.

Essential Skills: The learning in this course is organized around four enduring and transferable skills that each have two sub-skills. Feedback on how well students are meeting proficiency in each skill is provided using the proficiency scale on the class overview.

SKILLS	1. Selecting Statistical Methods	2. Data Analysis	3. Using Probability and Simulation	4. Statistical Argumentation
SUB SKILLS	A. I can identify and gather relevant information.	A. I can construct and describe numerical and graphical representations.	A. I can describe probability distributions and determine parameters.	A. I can assess claims and draw appropriate conclusions.
	B. I can identify appropriate inference methods.	B. I can calculate summary statistics and compare distributions.	B. I can construct confidence intervals and find p-values.	B. I can make decisions based on confidence intervals and p-values.

Course Expectations: Although not everything is graded, everything is important. In order to demonstrate growth and learning, students will need to:

1. Participate in class activities (take notes, work in a group, complete in class tasks, ask questions) without distractions (cell phones, games, etc.)
2. Use morning time and the teacher to seek help outside of class when needed.
3. Complete all assessments within teacher timelines.
4. Complete one project each semester.

Last Revised: 8/20/2023

Grading

Learning (Practice) includes instructional activities in and outside of class and are not used in grade determination.

Skyward Assessment (Grades) may include quizzes, labs, learning checks, tests, speeches, performances, projects, and finals.

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

Calculations:

Final Grade Calculation	
Cumulative Grade	**100%**

Central High School Courses:

-Will determine grades based on student performance and growth.
-Will not include practice and behavior in grade determination.
-Will give all students regardless of absence an opportunity to demonstrate learning.
-Will not include extra credit.

Instructional Resources: Primary Text: CPM *Statistics*, by Griswold, Hayes, Hooper, Lindemer, Rack, 2018

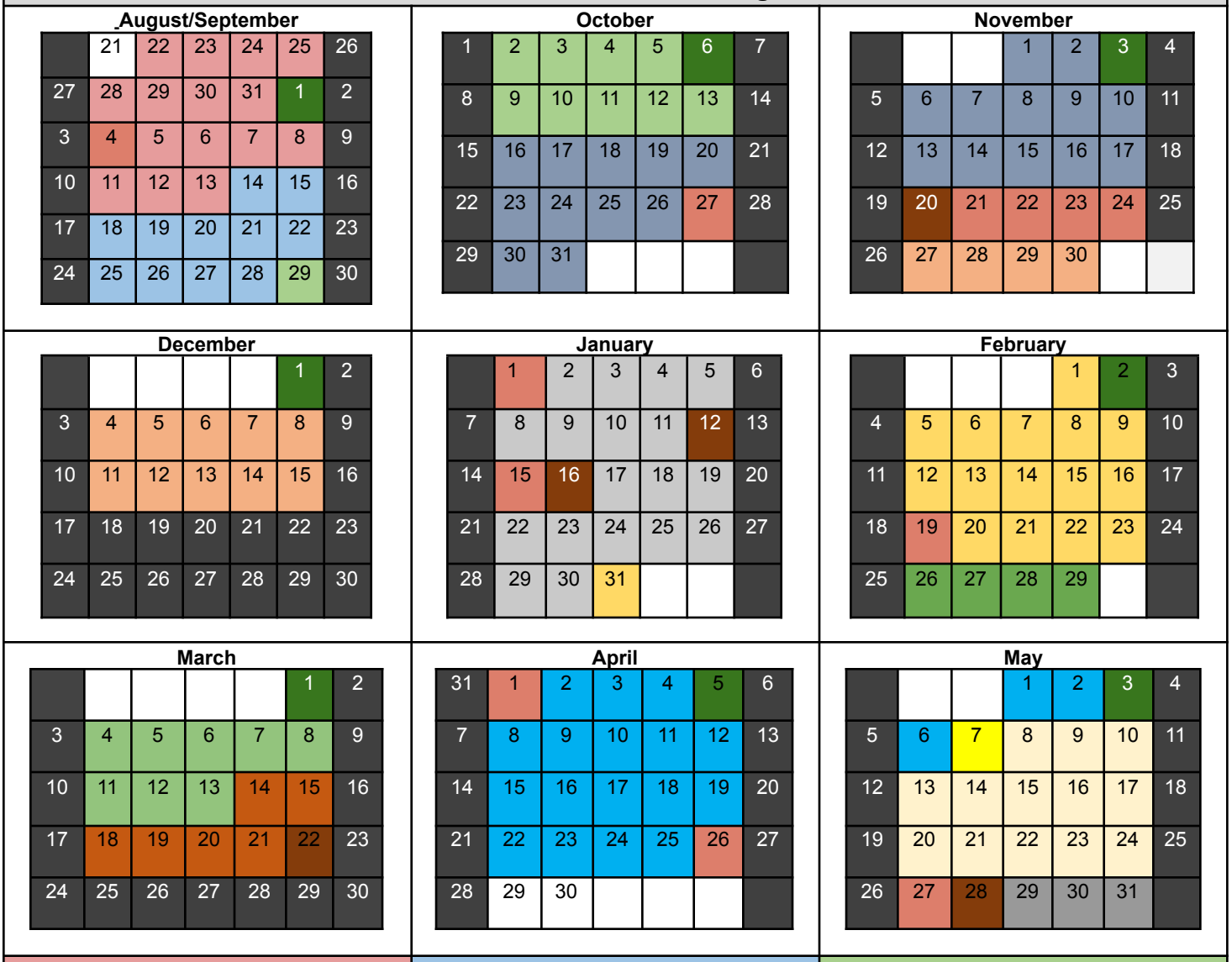
Required Materials: notebook or notebook paper, pencils, and erasers,

Calculator: A graphing calculator is required for all Advanced Placement Mathematics Courses. A TI-84, TI-Nspire, or TI-89 are strongly recommended.

Ebook access: https://ebooks.cpm.org/bookdb.php?title=stat

Course Calendar/Pacing:

2022-2023 AP Statistics Pacing Guide



Unit 1- Exploring One-Variable Data
14-16 Class Periods

Unit 2 – Exploring Two-Variable Data
10-11 Class Periods

Unit 3 – Collecting Data
9-10 Class Periods

Unit 4 – Probability, Random Variables, and Probability Distributions
18-20 Class Periods

Unit 5 – Sampling Distributions
10-12 Class Periods

Unit 6- Inference for Categorical Data: Proportions
16-18 Class Periods

Unit 7 – Inference for Quantitative Data: Means
14-16 Class Periods

Unit 8- Inference for Categorical Data: Chi-Square
10-11 Class Periods

Unit 9 – Inference for Quantitative Data: Slopes
7-8 Class Periods

School Testing | **Test Review** | **National Exam**

Project