Welcome to Statistics! This is an introductory statistics course designed to provide a basic understanding of descriptive and inferential statistics. We will use Statistics and Probability with Applications, 3rd Ed.in e-book form as our primary resource. Through the examination of real-world data, students will develop an awareness of the ubiquity of data collection and analysis in our digital age. Furthermore, students will recognize and examine the ethical complexities that arise in the reporting and usage of analytical findings.

Topics that will be covered include:
- One and two variable data analysis
- Methods of data collection
- Probability
- Random variables
- Sampling distributions
- Confidence intervals
- Significance tests
- Inference for categorical variables and regression

Materials: Please bring to each class:
- Charged computer
- Wired earbuds
- Writing utensil
- Binder and/or notebook

Assessments: Students will be assessed formatively through periodic quizzes from each unit. Summative assessments will be in the form of unit test and/or unit projects, a mid-term exam and final exam. Students will design and conduct a study using real-world data collection and then present their statistical analysis as a culminating course assessment.

Habits of Work for Learning: Preparation, Participation, and Perseverance will be assessed on a daily basis. Preparation and Participation will be tied to classroom behavior and will be tracked using a point system. Perseverance will be associated with homework completion. Each checkpoint students will have the opportunity to self-assess these areas using the WUHSMS rubric and I will provide feedback prior to this score report.
Classroom Expectations:
1. Arrive on time and begin First Five.
2. Listen and follow directions.
3. Raise your hand to speak during class discussions.
4. Keep your hands and feet to yourself.
5. Respect your classmates, your teacher, and school property.
6. You may bring a water bottle and snack to class.
7. Students may leave the classroom one at a time to go to the nurse, bathroom, office, etc. You must sign out and back in.
8. Wait to be dismissed.

Consequences:
1. If you fail to meet expectations, you will receive a polite request to discontinue the misbehavior.
2. If you continue to misbehave you will:
   a. Lose Preparation and/or Participation points
   b. Meet with me at the end of class
3. If the misbehavior continues over multiple class blocks:
   a. Your parents will be contacted
   b. You will receive a detention
   c. You will be required to complete a reflection sheet
4. Ongoing or severe misbehavior will be referred to the Dean of Students Office.

I am usually available to meet before and after school, C, D, and H blocks to assist students. Please let me know if these times don't work and I can set up a time to meet during middle school lunch.

Please feel free to contact me with any questions or concerns you may have at dwhitehead@wcsu.net or by phone, 802-457-1330, ext. 1103

Below is detailed information regarding WUHSMS policies that are common to all classrooms.

Assessment of Learning

Assessment Types:
Three types of assessments will be used to determine if you have gained the necessary knowledge and skills of this course: Formative assessments, Summative assessments, and Habits of Work for Learning. Each is briefly described below:

Formative Assessments: Formative = Forming my knowledge and skills. Formative Assessments receive a weight of .1 in the overall grade. Formative assessments are information for teachers, students, and parents on the progress students are making as they practice gaining knowledge and skills found in Anchor Standards. Teachers use the results of these assessments as data to understand individual student learning needs, adjust instructional pathways, and modify lessons to help students better meet course standards.
Students use the results of these assessments to determine how they are progressing and to plan steps to ensure their success.

**Summative Assessments:** Summative = Summation of my knowledge and skills.

Summative Assessments can receive three different weights: 1, 1.5, or 2 depending on the size of the assessment, and therefore have the greatest impact on the Overall Course Mastery Grade. Summative assessments are used as a measure of independent student achievement in Anchor Standards. Throughout this course, summative assessments provide benchmark student achievement data. A summative assessment will always have clear scoring criteria for students to understand how they are performing.

**Habits of Work for Learning:** Habits of Work for Learning (HOWLs) are skills and dispositions that are essential to the learning process but do not provide evidence of what a student knows or can do in relation to content. WUHSMS teachers work to foster Habits of Work for Learning in three categories: preparation, participation, and perseverance.

**Assessment Scoring:**

Teachers will provide framing for summative assessment scores using proficiency level scoring criteria for grading similar to the example below:

<table>
<thead>
<tr>
<th><strong>Anchor Standard:</strong></th>
<th>Construct viable arguments and critique the reasoning of others. (MP 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content Standard:</strong></td>
<td>Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. (HSS.ID.A.2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.0*</th>
<th>1.3*</th>
<th>1.7*</th>
<th>2.0</th>
<th>2.3</th>
<th>2.7</th>
<th>3.0</th>
<th>3.3</th>
<th>3.7</th>
<th>4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC*</td>
<td>NC*</td>
<td>NC*</td>
<td>C</td>
<td>C+</td>
<td>B-</td>
<td>B</td>
<td>B+</td>
<td>A-</td>
<td>A</td>
</tr>
</tbody>
</table>

**Beginning** | **Approaching** | **Proficient** | **Distinguished**
---|---|---|---
I can identify and the mean and median of a data set. | I can compare the mean, median, and mode of two data sets. | I can compare the shape, center and spread of multiple data sets. | I can determine the best measure of center to use when taking into account the effect of skew and outliers on data sets. |

*scores in the "Beginning range" are well below proficient and thus they are below passing.

**HOWL Scoring:**

HOWLs will be scored at least once per checkpoint and will be based on the frequency with which students demonstrate each of the habits: preparation, participation, and perseverance.

**How is my Overall Course Grade Determined?**

Overall course grades will be reported as letter grades and will be comprised of:

- Formative & Summative Scores: 95%
- HOWLs: 5%

For more information, please see the WUHSMS student handbook.

**Communication:**

**How Do I Know My Grades?**

- On Summative Assessments, a teacher will provide both a 4-point grade and a letter grade.
- You can monitor your progress in the following ways:
By reading feedback and scoring returned to students on summative assessments
By monitoring the scores and Overall Course Mastery Grade in the Parent/Student portal on JumpRope
By monitoring the grades sent home quarterly through report cards

Where Can I Find This Syllabus during the School Year?
• This syllabus will be available on the school website in each subject’s department tab once the school year is up and running.

How Do I See What’s Due?
• Summative assessment due dates and handouts are posted to the blue “Upcoming Assessment” section of the JumpRope Parent/Student Portal on or before the day they are assigned to students.

How Do I See What’s Past Due?
• If a student is missing an assessment, it will be listed in the red “Missing Assessment” section of the JumpRope Parent/Student Portal along with any attachments.

Schoolwide Procedures:

Please see the Student Handbook for Procedures and Policies related to due dates and deadlines, extra credit, retaking assessments, and turnaround time for grade entry.

Personal Mobile Devices: This class will follow the procedures outlined in the student handbook
Please return this form to Mrs. Whitehead by Friday, September 13th

I have read this syllabus*, and I have contacted the teacher with any questions I have.

Student name (printed): _______________________________________________________

Student Signed: ____________________________________________________________ Date: ______________

Parent/Guardian name (printed): ______________________________________________________

Parent Signed: ____________________________________________________________ Date: ______________

*Please note that a digital copy of the syllabus with links to various resources is available in your child's Statistics Google Classroom.