**Class: Statistics Honors**

**Techer: L. Landsberg**

**Room: 106**

**Email: landsbergl-changl@mcmsnj.net**

**Learning objectives/goals:**

To educate students to be complex, community involved thinkers who are highly proficient in elementary statistics and ready for further studies on the college level.

**Chapters of Study:**

1. Introduction to Statistics, 2. Descriptive Statistics, 3. Probability, 4. Discrete Probability Distributions, 5. Normal Probability Distributions, 6. Confidence Intervals, 7. Hypothesis testing with one sample, 8. Hypothesis testing with two samples, 9. Correlation and Regression, 10. Chi Square tests and the F-distribution.

**Proficiencies:**

1. Explain the fundamentals of a statistical study, 2. Describe data sets and their measures in different forms, 3. Use statistics to conduct and summarize an observation with both qualitative and quantitative components, 4. Calculate probabilities via counting principles, 5. ID various discrete probability distributions and calculate corresponding probabilities,

6. Interpret a normal distribution and make calculations using standard scores, 7. Construct confidence intervals and use them to interpret population means and proportions, 8. Formulate null and alternative hypotheses for claims made about population means and proportions, 9. Use appropriate statistical techniques to test hypotheses, 10. Describe the linear association for a set of paired data, 11. Comprehend and use efficient learning techniques to acquire and apply knowledge, 12. Communicate ideas to justify positions, 13. Develop and reinforce critical thinking processes, 14. Participate cooperatively in a team format, teaching, learning from, and negotiating with team members to contribute positively to team success.

**Additional skills**:

Use of efficient and multiple problem solving techniques

Skillful communication of ideas to justify positions

Development and reinforcement of critical thinking processes

Ability to work in a group to achieve success and further growth as learners

**Policies:**

Parents and students are welcome to email me directly with any questions or concerns at landsbergl-changl@mcmsnj.net. Emails are answered promptly during normal school hours.

Students are challenged to address the academic process enthusiastically, diligently, and most importantly, honestly. Academic integrity violations include, but are not limited to: Cheating, plagiarism, self-plagiarism or copy infringement, obtaining or providing an unfair advantage, falsification of documents, unauthorized access to records, and inappropriate collaboration, whether intentional or unintentional. You must do your own work.

**Homework:**

It is required that work be shown and ALL problems must be attempted.

You will also have a study group that you can contact if you are “stuck” on a particular topic.

**Remember: There is a significant difference between getting help and having something or someone else do your work for you.** There are consequences both academic and non-academic for students who do not adhere to this policy.

**If you are absent:**

1. Contact your study group for missed notes, classwork, and homework. Copy the notes and do the missed work. 2. You are responsible for finding out what you missed and completing the work following an absence. You should expect to take tests and quizzes at the regularly scheduled date.

**If you need help:**

1. First: Consult with your study group.
2. **At the start of each class, there will be an opportunity to ask questions on any unresolved homework problems.**
3. Use online resources, including the online textbook site. See me during homeroom or at an arranged time with questions. Get tutoring help from the National Honor Society.

**Required materials:**

Pencils, erasers, notebook, homework due that day (printed), chromebook**, graphing calculator (the TI 84 or TI 86 is highly recommended),** and a pen or pencil that is NOT blue or black.

**Grading:**

Tests/quizzes: 80%

Classwork/homework: 20%