



**Honors Statistics(12th grade)**  
**Mr. Reddy**  
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**Course Description:** The purpose of Statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to three broad conceptual themes: Exploring Data: Describing patterns and departures from patterns; Sampling and Experimentation: Planning and conducting a study; and Anticipating Patterns: Exploring random phenomena using probability and simulation.

**Text:** The Practice of Statistics (Third Edition) Freeman 2008 ISBN-13: 978-0-7167-7703-8

**Honor Code/Pledge:** John Milledge Academy expects each student to live as a responsible and honorable person. When students are admitted to John Milledge, they become identified with the school. It is expected that their conduct will reflect favorably upon them and the school at all times; therefore, the Honor Code is an integral part of the daily structure of school life which predicates the assumption that students are honorable and have the right to be trusted. Each student must take personal responsibility in accepting the Honor Code. The Honor Code encompasses academics, behavior, and character.

*“I pledge to always act in an honest, honorable, and accountable manner and expect the same of my fellow students. I agree to promote exemplary behavior at all times and understand that there will be consequences for inappropriate actions.”*

**Tardy/Attendance:** Attendance is mandated by our accreditation and is valued because of the educational content of each class. Students are expected, therefore, to be present for all classes. Any absence or tardiness must be documented in writing or by oral communication with the parents. Furthermore, tardies and absences influence a student’s ability to exempt spring exams (see Handbook for details).

For tardies:

- A student is considered tardy to school from 1 minute to 10 minutes after the late bell of the first class of the day for the student. Students with more than 10 unexcused tardies to school in a school year will not be able to exempt exams.
- After each set of four tardies to the first class, students receive one unexcused tardy absence from class.
- A student is considered unexcused tardy absent from the first class beginning at the 11th minute after the late bell.

For absences:

- After 8 unexcused absences in a year, a student may not exempt spring exams.
- After 10 unexcused absences from any class per semester, a student will receive an INCOMPLETE for his/her semester grade. Extenuating circumstances will be reviewed by administration on appeal (see the “Appeals” section in the Handbook for details).
- Students may be given an opportunity to receive course credit and avoid receiving an INCOMPLETE by making up course time in credit recovery during exam make-up days, or during summer school if deemed necessary. A student will need one hour of credit recovery per unexcused absence after 10 unexcused absences each semester.
- Additional unexcused absences may result in additional disciplinary actions up to and including loss of credit for the course at the discretion of the Head of School.

**Make-Up Work:** It is the student’s responsibility to secure all missed work and to ensure that all requirements are satisfied.

A student is expected to complete all class work within 3 days after being absent. This applies to assignments missed during the absence, without prior knowledge. Students need to be proactive and consult on a teacher-by-teacher basis to schedule make-up work. A student should be prepared to take tests or complete any make-up work that he/she has prior knowledge of on the next day after missing. Please refer to the Parent/Student Handbook for the complete Make-Up Work Policy.

**Homework:** Homework, projects, and reports may be assigned at the discretion of the teacher on week nights and/or weekends. All students are expected to do their homework thoroughly and turn it in at the beginning of the class on the due date or at the discretion of the teacher.

**Grading:** A student's yearly grade consists of an average of each semester's grade. For all classes, semester exams are weighted as 20% of a semester grade.

- Daily Grades/assignments: 20%
- Quizzes :20%
- Tests: 40 %
- Semester Exam / Capstone Project: 20%

**Exam Exemptions:** Students may exempt final exams on a class by class basis if the following conditions are met:

- They have a 90 yearly average in that subject or higher
- They have 8 or less unexcused absences during the year or 4 or less unexcused absences for a one semester class in that subject
- They have 10 or less tardies to school for the year
- They have had no major disciplinary action in any subject

No one will be exempted from midyear exams unless it is a one semester course.

Students may not be eligible to exempt an exam grade if the class requires a term/research essay or capstone project at the end of the semester/year.

The teacher will notify the student, in writing, of his or her exemption by the last day of regular class prior to the final examination week.

**Pertinent Information:** All students are responsible for the rules and policies set forth in the most current Parent-Student Handbook, found online at [www.johnmilledge.org](http://www.johnmilledge.org) under "quick links."

Insert other pertinent information if necessary.

## Course Outline

**Below I have listed topics we plan to cover in this course:**

**Chapter 1: Exploring Data**  
Displaying Distributions with Graphs

Describing Distributions with Numbers

**Chapter 2: Describing Location in a Distribution**

Measures of Relative Standing and Density  
Curves  
Normal Distributions

**Chapter 3: Examining Relationships**

Scatterplots and Correlation  
Least-Squares Regression  
Correlation and Regression Wisdom

**Chapter 4: Relationships between Two Variables**

Simpson's Paradox  
Establishing Causation

**Chapter 6: Probability**

Simulation  
Probability Models  
General Probability Rules

**Chapter 7: Random Variables**

Discrete and Continuous Random Variables  
Means and Variances of Random Variables

**Chapter 8: Binomial and Geometric Distributions**

\*The Binomial Distributions  
\*The Geometric Distributions

**Chapter 5: Producing Data**

Designing Samples  
Designing Experiments

**Chapter VI: Set Theory (supplemental material)**

Definition of a Set  
Kinds of Sets  
Set Operations

# Math Binder Guidelines

Mr. Reddy

1. Use a 3-ring, loose-leaf binder (your work must be in order).

2. Order of Content:

**First section:** Page 1 – Title page; name, subject, and period

Page 2-7 – Class Syllabus

**Second Section:** Graded Material (Keep graded quizzes/tests in this section for future reference)

**Third Section:** Homework Assignments (Show all work!!!)

**Fourth Section:** Bell Ringers

**Fifth Section:** Notes (students may keep this section in a spiral notebook if they prefer)

3. All assignments are to be complete. You are responsible for making up any missed work.

4. PENCILS ONLY! It is divine to erase.

5. Homework Quizzes will be given every chapter. They will count just as much as one quiz. This is an easy grade... keep up with your assignments.

## Math Requirements

Mr. Reddy

1. Each student is required to keep a math binder. It should be a 2” 3-ring binder and contain only math. In addition, students may use a spiral notebook for notes if they wish.
2. The binder will contain a title page and course syllabus, a section to store graded material (quizzes, tests, etc.), a section for homework assignments, a section for “Bell Ringers”, and a section for notes (unless kept in spiral). Some type of dividing tabs would be helpful in organizing these sections.
3. Students are to use pencil only on assignments (except reports or projects).
4. Students will be graded on daily homework assignment completion, frequent graded homework assignments, pop quizzes, announced quizzes (worth more points, usually over multiple sections), tests on each chapter, homework quizzes on each chapter, and occasional group projects. Opportunities for optional extra credit will be given to the whole class occasionally.
5. I encourage the use of calculators. John Milledge Math Department requires all high school students to have a graphing calculator (8<sup>th</sup> graders are highly encouraged, but not required to purchase a graphing calculator). I suggest a TI 84 or 84+. This calculator will get them through all their math classes and can be used on all national and state tests (SAT, ACT, etc.). They will also find them indispensable in chemistry and physics. Unfortunately, they cost around \$120.
6. Students should keep an ample amount of loose leaf notebook paper in their math binder for notes, assignments, etc. Also, students should keep a supply of loose leaf graph paper in their binder.
7. A class file will be kept in the classroom. It will contain folders that have handouts and homework assignments for each day. Should your child be absent, it will be his/her responsibility to collect the material he/she missed. Although daily homework completion grades are not deducted due to absences, it is of the student’s best interest to still make up the missed homework. At the end of each chapter there will be a homework quiz.

I welcome the opportunity to work with your child. I arrive at school early (about 7:30) and am available to assist with homework or other assignments.

### Classroom Expectations (AKA “Mr. Reddy’sgoogle Gotta Be’s”):

- ✓ **Be On Time:** Be in your seat by the time the bell rings and stay there *quietly*.
- ✓ **Be Prepared:** Have materials and assignments needed for class.
- ✓ **Be On Task:** “Be in the game.” 100% focus on what we are doing in class. *No disruptive behavior.*
- ✓ **Be Respectful:** Respect for self, others, and school property. No Talking when teacher or someone else is addressing the class.
- ✓ **Be Responsible:** Take responsibility for yourself and all of your actions.

