



Reynolds High School

Math Games (2023 – 2024)

Building Relationships for Academic Success

Instructor: Andrea Hernandez
Room 705

Phone: (503) 667 – 3186 #1064
Email: ahernandez@rsd7.net

Necessary Materials:

- Chromebook – charged, decluttered, and updated
- Spiral notebook
- Pens, pencils, colored pencils, highlighters
- A scientific calculator

Course Description:

This course will use games as the vehicle to explore math concepts. We will study probability, expected value, Pascal's Triangle, and combinatorics. We will see how to use these concepts to make decisions, problem-solve, and evaluate or create a game. It is a semester course and awards 0.5 math credit. The final exam will be project-based.

Disclaimers:

By taking this course, you are agreeing to interact with all other students in the class. Students with anxiety issues can be successful with some accommodations, but a willingness to play games with others is crucial to a successful outcome.

Using cell phones, headphones, and ear buds during class will interfere with your ability to interact with others in class. Keep them off and away.

This class relies heavily on good attendance. If you miss class, you may miss activities that cannot be recreated. This will negatively impact your grade.

New Bell Schedule – Block Periods!

Things are changing this year at RHS! We are on a block schedule, which means we will meet every *other* day for 90 minutes instead of every day for 50 minutes. Attendance will be more important this year. Missing one day of class has double the impact as it did last year. Missing class also means that there are some class activities that will be very difficult, even impossible, to make up.

It will be important that you know what day it is (A-day or B-day) so that you have the appropriate materials with you. Please use your student planner, which you will get on Monday, September 11, to help you stay organized.

Grading:

Three categories of scores will go into the gradebook: Summative, Participation, and Formative.

- *Summative* assignments are unit exams, projects, and work samples. (45% of grade)
- *Participation* is playing and evaluating games and observed behaviors. (35% of grade)
- *Formative* assignments are classwork, homework, and quizzes. (20% of grade)

You are responsible for getting and completing any assignment missed when you're absent.

Grade Weights:

- Summative (exams): 45%
- Participation (playing and evaluating games): 35%
- Formative (classwork, homework, quizzes): 20%

Graded Items and their Absent/Late/Retake Policies:

Participation is expected daily when we are playing and evaluating games and when we are working on daily lessons. Positive participation includes behaviors such as playing games, taking notes, treating supplies with care. Negative participation includes behaviors such as refusing to play games, isolating yourself (head down, phone out, headphones/earbuds in), mistreating supplies. Participation also includes the written evaluations we do on the games we play. Not all participation opportunities are able to be recreated for absent students.

Classwork is a formative item and will include warm-ups, exit tickets, and any work expected to be completed and turned in during class. If you are absent, please work with me to get what you missed.

Homework is a formative item and will be assigned regularly. Assignments are due at the beginning of the next class unless otherwise stated. Every effort should be made to turn in work on time, but students can still receive full credit for an assignment if it is turned in the same week it was due. It can continue to be turned in for late credit until the day of the test. If turning in work late because of an absence, please write "absent" on the top to avoid it being marked late.

Quizzes are formative items and will be given periodically to check for understanding. These should be completed in class in the time allowed. They should be made up as soon as possible if missed because of an absence and must be done before the exam over the same material. Quizzes cannot be retaken to improve a score.

Exams and *Work Samples* are summative items and are given in class. They must be completed and turned in before leaving class. If you are absent for an exam or work sample, please arrange with me a time to take it upon your return to class (after school works best). You can retake each exam once to improve your score up to 90%.

The Final Exam will be the presentation of a game to the class.

Letter Grade Description & Percentage Breakdown:

| Grade Percentage | Letter/Scale Grade | Description |
|-------------------------|---------------------------|--|
| 100% - 90% | A/5 | The student fully understands the content and the course objectives have been mastered. |
| 89% - 80% | B/4 | The student understands the content and course objectives at an above average level. |
| 79% - 68% | C/3 | The student understands the course content and course objectives at an average level. |
| 67% - 56% | D/2 | The student understands the course content at a below average level and a minimum of course objectives are met. |
| 55% - 1% | F/1 | The student has not met a sufficient number of course objectives to pass a minimum level and receives no credit. |
| 0% | N/0 | No work has been completed to allow for an evaluation. No credit earned. |

Course Schedule/Outline of Units

| MONTH Semester 1/Semester 2 | TOPIC |
|---------------------------------------|--|
| September/February | Unit 1: Probability Math Content: probability, simulations Exam #1 |
| October/March | Unit 2: Expected Value Math Content: expected value, displaying data Exam #2 |
| November/April | Unit 3: Pascal's Triangle Math Content: Pascal's Triangle Exam #3 |
| December/May | Unit 4: Combinatorics Math Content: permutations, combinations, counting Exam #4 |
| January/June | Final Project |

Class Expectations (POWER):

| <u>Letter</u> | <u>Stands for</u> | <u>What does this look like in our classroom?</u> |
|---------------|---------------------|---|
| P | Prepared & Punctual | Be in your seat when the bell rings. Have your supplies out and ready to use. Have your assignment out and ready to correct. |
| O | Organized | Have a spiral notebook for classwork and notes. Have a binder or 2-pocket folder for class papers. Have your computer files named and saved in folders. |
| W | Writers | Write assignments and test dates in your planner. Write the Warm-Ups, notes, and Exit Tickets in your spiral notebook. Learn and use mathematical notation in your assignments. |
| E | Engaged | Do the activities assigned. Work well alone and with your group. Stay in class unless it is an emergency. Use class time to be a mathematician. |
| R | Respectful | Sit in your assigned seat. Get permission to touch or use other's property. Treat classroom supplies carefully. Phones, headphones/earbuds, and food are put away. |

Other:

- This class will be using cards, dice, and other games and game pieces. If you mistreat these necessary supplies, you may be asked to replace them and/or lose the privilege of using them.
- Students will be expected to check Schoology (reynolds.schoology.com) for class information. *The Week Ahead* document and the *Daily Agenda* will be found here.
- In addition to my expectations, please refer to pages 23 – 24 in the student planner for schoolwide POWER expectations and respect matrix.
- Grades will be posted in StudentVue. See page 4 in the student planner for access information.
- Parents can get a ParentVue account to check on grades.
- Computer and other account login information can be found on page 8 of the student planner.