

PROBABILITY & STATISTICS

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COURSE DESCRIPTION

PROBABILITY & STATISTICS will be an exciting, thought-provoking class that will extend your knowledge of mathematics to include CHANCE and ANALYZING DATA. We will learn about a variety of ways to GRAPH DATA as well as how to interpret those graphs. We will learn how to calculate MEAN, STANDARD DEVIATION, and VARIANCE. We will also learn about PROBABILITY, including COMBINATIONS and PERMUTATIONS. In addition, we will discuss many different statistical DISTRIBUTIONS and understand their properties. Finally we will conduct SURVEYS and test HYPOTHESIS.

One goal of this class is to RELATE MATHEMATICS TO YOUR LIFE. Throughout the term, will be engaged in a variety of ACTIVITIES, PROJECTS, ASSIGNMENTS, and PROBLEM-SOLVING situations which will help you to see how probability and statistics is all around you and can be applied to your life. A second goal of this class is to incorporate TECHNOLOGY in learning about mathematics. Therefore, we will be using COMPUTERS and GRAPHING CALCULATORS very frequently to simulate situations and solve problems.

CLASSROOM RULES

- ⊕ **BE RESPECTFUL!** If someone is talking you should be listening.
- ⊕ **NO** name calling!
- ⊕ **NO** use of any vulgarity or inappropriate language that would offend me.
HINT: (If you need to ask if it is inappropriate or vulgar it most likely means it shouldn't be said!)
- ⊕ If it is not yours don't touch it without **asking for and getting** permission to.
- ⊕ **NO WHINING!**
- ⊕ **NO FOOD, SODA, OR SPORTS DRINKS! WATER ONLY!!**
- ⊕ **NO** cell phones or MP3 players, if I see you with them I will take them.
- ⊕ Keep an open mind and be ready to learn!

SUPPLIES

- ⊕ Textbook, covered (Statistics and Probability in Modern Life)
- ⊕ Notebook or loose-leaf paper
- ⊕ Pencils and erasers
- ⊕ Colored pen or pencil **NO RED PENS!**
- ⊕ Scientific calculator
- ⊕ Binder of at least 1 ½ inches thickness

GRADES

- ⊕ Scores will be weighted as follows:

Quizzes & Tests	40%
Homework	40%
Projects	10%
Participation	10%

- ⊕ Letter grades will be as follows:

94 – 100%	A	74 – 76%	C
90 – 93%	A-	70 – 73%	C-
87 – 89%	B+	67 – 69%	D+
84 – 86%	B	64 – 66%	D
80 – 83%	B-	60 – 63%	D-
77 – 79%	C+	Below 60%	F

HOMEWORK

Purpose: To practice and apply the concepts explored in class to real-life problems and to practice mathematical steps for solving particular types of problems.

- ⊕ Homework will be scored on a 5-3-0 scale.
 - ⊕ 5 = ALL problems attempted with ALL work shown.
 - ⊕ 3 = More than 50% of the problems attempted with ALL work shown.
 - ⊕ 0 = Less than 50% of the problems attempted OR
NO WORK shown (regardless of the number of problems attempted) OR
Solutions are copied from other sources.
- ⊕ Questions on homework assignments will be addressed in class daily.

PROBLEMS OF THE DAY (PODS)

Purpose: To allow you to encounter non-routine problems and help you to develop your problem-solving skills by apply mathematical concepts to solve these problems.

- ✦ POD's will be in the first 5 or 10 minutes of class most days.
- ✦ POD's are worth 5 points a week and count towards participation.
- ✦ You will be required to write up a solution to the problem. Each solution will be based on the mathematics used, format, and clarity.
- ✦ POD's are to be put into your binder and checked at the end of each chapter.

QUIZZES AND TESTS

Purpose: To assess your ability to apply the mathematical concepts discussed in class.

- ✦ All tests will be announced a week in advance. You will generally have a test following each chapter.
- ✦ Quizzes may or may not be announced.

PROJECTS

Purpose: To allow you to apply your mathematical knowledge, creativity, communication skills, and group skills to mathematical problems and connect math to other subject areas and real-life situations.

- ✦ There will be individual and group projects that will be completed throughout the semester. These will be announced as we get to them.

BINDERS CHECKS

Purpose: To assist students with their organizational skills and help improve on their quiz and test taking preparation.

- ✦ There are **4** different sections that you will need to keep in order.
- ✦ The **first** section is to hold your notes. You may use loose leaf paper or put in a ringed notebook.
- ✦ The **second** section is to hold your graded homework assignments.
- ✦ The **third** section is to hold your POD's.
- ✦ The **fourth** section is to hold your graded quizzes and tests.
- ✦ Binders will be checked at the end of each chapter during test time. This grade goes towards your participation.

ATTENDANCE AND MAKE-UP WORK

- ⊕ You are responsible for obtaining any work missed during an absence. You must get the notes and the assignment from a classmate and any handouts from me.
- ⊕ Late homework assignments are due by the end of the week assigned for partial credit. Any time after that will not be accepted. **NO EXCEPTIONS!** If you have any questions, you must get in touch with me to arrange a time to discuss them.
- ⊕ If you are absent only the day before a quiz or test, you will take it on its scheduled day.
- ⊕ Tests and quizzes are to be made up the day you come back to school or scheduled with me. It is **your** responsibility to schedule the make up with me.
- ⊕ If your absence is unexcused, no credit will be given for assignments, quizzes, or tests completed that day.

GRAPHING CALCULATORS

- ⊕ We will use graphing calculators very frequently throughout the term. You do not need to own your own. If you do, that's great – bring it and use it! If you don't you will need to check one out from me to use during the class period for the term. If you are looking to buy one (one is required for Pre-Calculus) we suggest a TI-83 Plus, TI-84 Plus, or TI-86.
- ⊕ Due to other classes and students needing to use the graphing calculators, they are not available to be taken from the classroom.

EXTRA HELP

I will be available during study period (ask for a pass before study period) as well as before and after school on most days. You may also call me at school (635-4347 ext. 415) or send me an email (nleu@poynette.k12.wi.us) if you need help. I am here to help you be successful! Please don't hesitate to ask questions.



I have read and understood the expectations of **PROBABILITY & STATISTICS**.
(Please sign and return by September 8, 2009.)

Student Signature _____

Date _____

Parent Signature _____

Date _____