

Please feel free to contact me at any time.
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Course Description: Statistics 12 is an academic math course that builds on students' previous mathematical knowledge. It is designed to introduce students to the methods of data collection and data analysis. Students will have oportunities to develop a statistical thinking and an ability to use technolgy to effectively work with data and to clearly communicate their findings and conlcusions. A successful student will be able to critically analyze scientific articles, daily news, advertisements, and popular discourse. This course will assist students to develop a deeper understanding of probability principles and statistics which will prepare them for postsecondary statistics and data management courses. The overall framework for this course will be anchored by the big ideas and curricular competences given by the current curriculum document that can be found at: . https://curriculum.gov.bc.ca/curriculum/mathematics/12/courses. The overall goal of this course is to encourage students to look beyond calculations and appreciate the far-reaching possibilities of mathematics in a real-life context.

## Course timeline:

| Month | Topic |
| :---: | :--- |
| January | Statistical thinking. <br> Data collection: bias and types of sampling. <br> Observational and experimental studies. |
| February | Measures of central tendency. <br> Common graphical representation of variation. <br> Summary statistics to describe variation. |
| March | Probability. <br> Probability models for variation. |
| April | Association between two variables. <br> Inferential concepts: confidence intervals and hypothesis tests. |
| May | Inferential concepts: confidence intervals and hypothesis tests continued. <br> Communication of statistical findings. |
| June | Review and Final Assessment |

## COURSE EVALUATION:

1. Test topics and dates will be announced in advance. Students are encouraged to make an arrangement with their teacher to write the missed test as soon as they return to school after their excused absence.
2. Quizzes will NOT be announced in advance. A grade of zero will be scored for a quiz missed due to lateness or unexcused absence. A student with an excused absence on the day of the quiz will not be penalized. Quizzes will be solely based on material presented in class and assigned homework.
3. Assignments (projects, in-class work and assignments) will be checked regularly, and may be collected without prior notice. It is expected students will demonstrate the steps leading to their answer in all work. Unsubstantiated work will not be credited as the process leading to an answer is often more valuable than the answer itself.
4. Attendance and behavior expectations for quizzes and tests are the same as the school's expectations of students for final exams.
5. Copying other's work, enabling others to copy one's work, and using unauthorized material during quizzes and tests is considered plagiarism. Plagiarism is a severe offense and it will be taken into consideration during student's evaluation.
6. Students are expected to clearly identify all the resources and references they use to complete any given project or assignment.
7. *Conversations among peers and with a teacher are essential components of assessment and evaluation. Peer talks and small group and whole-class discussions will be used to determine the level of understanding, to emphasise connections with already known and mastered material, and to allow students multiple opportunities to communicate their understanding and to voice their questions in a safe environment.
8. *Students' ability to work independently, to effectively and respectfully cooperate with others, to assess their own work and the work of their peers, to set goals, and to plan strategies to achieve the goals will be observed, assessed and evaluated.

## CALCULATION OF CLASS WORK MARK: <br> Tests <br> Quizzes <br> Project* <br> Assignments and class work * 25.0\% Total 100.0\%

FINAL MARK - School-based final exam
Class work 80.0\%
Final Exam 20.0\%
Total 100.0\%
9. The Final Exam will be during the scheduled PCSS exam week. It is the student's responsibility to be familiar with the published exam schedule.

## RESOURCES:

Textbook - Data Management 12 (Erdman et al.).
Worksheets and handouts.
Statistics websites, magazine and newspaper articles when applicable.
Excel and other software.

## GENERAL EXPECTATIONS:

Students are expected to show respect for their classmates by arriving to class prepared and on time. Cell-phones, laptops, i-pods, i-pads and other electronic devices are not to be used by students while in class. Exceptions may be made for laptops and i-pads to conduct research.

This information sheet is to inform students and parents/guardians of the expectations for this course. Please sign and return. Thank you.

Student Name: $\qquad$ Student Signature: $\qquad$

Parent/Guardian Signature: $\qquad$ Date:


Questions or comments:


Please, answer the following questions. If you are not sure, ask around or ask Google.

- What is statistics?
- How is statistics different from math?
- What is math good for in statistics?
- What is statistics good for?
- What is problem-solving?
- What strategies do you use to solve problems

"It's a non-linear pattern with oufliers......but for some reason I'm very happy with the data."


## Please fill in:

## 1. I am good at

$\qquad$
$\qquad$
2. At school, I am good at

$\qquad$

4. I am most interested in

5. I usually have difficulty with

## 6. I would appreciate help with

7. I am $\qquad$ at note-taking.
8. I am $\qquad$ at reading assigned passages from a textbook, and extracting important information.
9. 1 am $\qquad$ at copying notes from the board.

Please circle the expression(s) that most appropriately describes your attitude towards this course.


I am taking statistics 12 just because I did not want to take any other course and I needed another credit.

I am curious to see if I like statistics.

I could not care less about statistics 12 or any other course.

## Other:

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$\xrightarrow[\text { MORE PURE }]{\longrightarrow}$


