

Foundations of Math 12 Course Outline

Mrs. Buck
2012-13

Learning Outcomes:

- A1 – Solve problems that involve compound interest in financial decision making.
- A2 – Analyze costs and benefits of renting, leasing and buying.
- A3 – Analyze an investment portfolio in terms of: interest rate, rate of return, total return.
- B1 – Analyze puzzles and games that involve numerical and logical reasoning, using problem-solving strategies.
- B2 – Solve problems that involve the application of set theory.
- B3 – Solve problems that involve conditional statements.
- C1 – Interpret and assess the validity of odds and probability statements.
- C2 – Solve problems that involve the probability of mutually exclusive and non-mutually exclusive events.
- C3 – Solve problems that involve the probability of two events.
- C4 – Solve problems that involve the fundamental counting principle.
- C5 – Solve problems that involve permutations.
- C6 – Solve problems that involve combinations.
- D1 – Represent data, using polynomial functions (degree ≤ 3), to solve problems.
- D2 – Represent data, using exponential and logarithmic functions, to solve problems.
- D3 – Represent data, using sinusoidal functions, to solve problems.
- E1 – Research and give a presentation on a current event or an area of interest that involved mathematics.

Assessment:

- Learning Activities: You will be assessed using one or more of the following types of activities: text assignments, worksheets, problems, projects, reflection writings, quizzes, and tests.
- There will be two types of assessment: (1) student ability to understand the prescribed learning outcomes and (2) student effort
- (1) Two types of assessment of understanding will take place:
 - Formative assessment: All assigned work is designed to help you understand the concepts within the course. Practice assignments will not count towards your final grade but they are required work.
 - Summative assessment: Assessments such as tests, projects, and some assignments will count towards your final grade. You will always be informed when an assessment is summative and will have an effect on your final grade. You may be required to complete a minimum amount of practice to demonstrate your readiness before completing a summative assessment.
- (2) Effort will be assessed using the rubric available to students and parents on JupiterGrades at <https://jupitergrades.com/login/> or on Mrs. Buck's Math website <http://mrsbuckmath.weebly.com>.

- Every learning outcome will be assessed at least twice. JupiterGrades uses the most recent assessment to calculate the final grade. If the most recent assessment is lower than the first, but close, then you may ask Mrs. Buck to omit the most recent assessment. If the second assessment is lower than the first but by a large amount then you may ask Mrs. Buck to average the two results. If you do not make the request for either of these changes before the marks are submitted to the office then JupiterGrades will use the most recent mark to calculate your report card mark.

Tools needed: The following tools must be brought with you each class: textbook, binder and paper, graph paper, pencils, scientific calculator, eraser, and ruler. A graphing calculator will be needed at times throughout the course. You will not be permitted to go to your locker during class.

Course guidelines:

- The concepts of this course are more easily remembered if they are learned, not just memorized. This is best achieved through practice so complete all activities and assignments.
- Text assignments are needed for practice, and will be reviewed for process, but will not be assigned a mark.
- If you are absent, it is your responsibility to find out what you missed and complete the work. Missed assignments can be retrieved from Mrs. Buck during class, from Mrs. Buck's Math website <http://mrsbuckmath.weebly.com>, or by emailing her at tbuck@sd73.bc.ca.

Classroom rules:

- Please ensure you arrive on time and keep washroom visits to a minimum. Also, please do not leave the room without permission from Mrs. Buck.
- Your behaviour should in no way interfere with the learning of any student within the class, including yourself.
- Please attend class regularly. High achievement is difficult to attain when attendance is low.
- Please do not write in the textbook or on the classroom furniture.
- Please use the garbage can and recycle boxes for the appropriate items.
- Eating and drinking is not allowed in the classroom. If you are ill, please request permission from Mrs. Buck to have a bottle of water (with a cap).
- Please keep electronics such as ipods and cell phones off and out of sight in the classroom.

Student contact: Students will have daily contact with Mrs. Buck in the classroom. They are also expected to regularly access JupiterGrades at <https://jupitergrades.com/login/> and Mrs. Buck's Math website <http://mrsbuckmath.weebly.com> for further information.

Parental contact: I will be using JupiterGrades to compile marks again this year. It is an online program so students and parents can access marks on the Internet at

any time at <https://jupitergrades.com/login/>. As well, parents may call me at 674-3328 or email tbuck@sd73.bc.ca to discuss student progress.