Phone: 1-306-682-2558
Toll free: 1-866-966-2558
Fax: 1-306-682-5154
10333 - 8th Avenue
Post Office Box: 40
Humboldt Saskatchewan
Postal Code: S0K-2A0

Distance Education Course Outline

Foundations of Mathematics 30

GENERAL INFORMATION

i.   Foundations of Math 30

ii. Asynchronous, based out of Watrous Winston School

iii. Teacher: Cindy Cantelon

iv. There are various ways in which I can be accessed. I prefer email communication:

   By email   cindy.cantelon@horizonsd.ca

   Moodle   send me a message through moodle

   By phone   (best to call right before school, at lunch, or right after school)
                at Watrous Winston School 946 3309

                If I am not available please leave your name and number and I will call back

COURSE DESCRIPTION

i.   This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into post-secondary programs that do not require the study of theoretical calculus.

   Topics include: investing and borrowing money, logic, counting, probability, polynomial, exponential, logarithmic and sinusoidal functions.

ii. Prerequisites: Foundations of Math 20

STUDENT LEARNING OUTCOMES:

i.   Demonstrate understanding of financial decision making including analysis of: renting, leasing, and buying credit compound interest investment portfolios. [

ii. Demonstrate understanding of inductive and deductive reasoning including: analysis of conditional statements analysis of puzzles and games involving numerical and logical reasoning making and justifying decisions solving problems.

iii. Demonstrate understanding of set theory and its applications.

iv. Extend understanding of odds and probability.

v.   Extend understanding of the probability of two events, including events that are: mutually exclusive non-mutually exclusive dependent independent.

vi. Demonstrate understanding of combinatorics including: the fundamental counting principle permutations (excluding circular permutations) combinations.

vii. Demonstrate understanding of the representation and analysis of data using: polynomial functions of degree ≤ 3 logarithmic functions exponential functions sinusoidal functions.

TEACHING STRATEGIES:

i.   There are instructor prepared videos for each topic. The chapter overview communicates what needs to be completed each chapter. This includes practice questions with answers that can be found at the back of the text.

ii. Each chapter has a few Hand Ins and a pretest. The pretest needs to be handed in before the Chapter Test. You can receive partial marks for showing your process – not just the right answer.

Phone: 1-306-682-2558
Toll free: 1-866-966-2558
Fax: 1-306-682-5154
10333 - 8th Avenue
Post Office Box: 40
Humboldt Saskatchewan
Postal Code: S0K-2A0

iii. This is an asynchronous course, so it may be completed at your own timeline, but all course material must be completed by: January20 for Semester 1 and June 15th for Semester 2   Here's a suggested timeline to complete the course by the end of the semester.

Semester 1		Semester 2	
Chapter 1	Sept 1- 23	Chapter 1	Jan 31--27
Chapter 2	Sept 26-Oct 11 (no exam)	Chapter 2	Feb 28- Mar 10 (no exam)
Chapter 3	Oct 12-28	Chapter 3	March 13- Apr 3
Chapter 4	Oct 31- Nov 16	Chapter 4	April 4- April 13
Chapter 5	Nov 17-30	Chapter 5	April 24-May 4
Chapter 6	Dec 1-15	Chapter 6	May5-May23
Chapter 7	Dec 16- Jan 9	Chapter 7	May 24-June 5
Chapter 8	Jan 10-20	Chapter 8	June 6-20
FINAL EXAM	Schedule with your school during exam time.		

COURSE MATERIALS

i. Textbook: Nelson Foundations of Mathematics 12.

ii. While it is not required, using a graphing calculator is valuable.   You do not need to purchase one, as we will use online simulators and calculators especially desmos.   You will also need access to a spreadsheet such as excel.

EVALUATION:

i. Assignments   – 30%

Students will be responsible for the completion of their practice assignments. Practice assignments will be self-corrected using the answer key provided at the back of the book. No marks will be given for practice questions.   Do not be tempted to skip these as they are important for your development. Make mistakes here – seek help and remedy the problem before hand in assignments

 Each chapter will also have hand-in assignments for marks. You will receive marks for process and for the correct answer.

ii. Chapter Tests – 50%

Students are expected to write the exam on the day and time arranged.   If an unforeseen absence does occur (ie. medical emergency, illness, funeral), I will need a phone call or email clarifying the reason for the missed exam.

I do not offer rewrites. If the mark does not reflect ability, send me an email or give me a call

iii. Final Examination – 20%

This will assess and provide feedback about your achievement related to the preparation for and completion of a summative final examination.

You will arrange exams with your cooperating teacher and I will email the exam to them. Your cooperating teacher will email me the completed exam   Outline what percentage of the final grade will assignments will be worth.

You may prepare ONE double-sided sheet of paper to be brought into the Test.   This sheet may include definitions, sample questions, diagrams and notes for your success on the exam.