North Grenville District High School
Upper Canada District School Board

DATE: February 4, 2016

COURSE OUTLINE:

Course: MBF 3C, Foundations of College Mathematics, Grade 11
Prerequisite*: Grade 10 Foundations of Mathematics, MFM 2P or Grade 10*
Principles of Mathematics, MPM 2D
Credit Value: 1

This course was designed with the Ontario Curriculum Policy Document *http://www.edu.gov.on.ca/eng/curriculum/secondary/*	
Teacher: Mr. C. Stewart	**Principal: Mr. D. Cole**

COURSE DESCRIPTION

"This course enables students to broaden their understanding of mathematics as a problem solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analyzing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking" (p67, The Ontario Curriculum: Grades 11 and 12-Mathematics, Revised 2007).

COURSE WEBSITE

Students and parents can access course information by going to www.ltngdhs.weebly.com and selecting MBF 3C-Period 3 from the Semester 2 list of courses under "Find Your Class".

AREAS/UNITS OF STUDY

Mathematical Models	-make connections between the numeric, graphical, and algebraic representations of quadratic relations, and use the connections to solve problems -demonstrate an understanding of exponents, and make connections between the numeric, graphical, and algebraic representations of exponential relations -describe and represent exponential relations, and solve problems involving exponential relations arising from real-world applications
Personal Finance	-compare simple and compound interest, relate compound interest to exponential growth, and solve problems involving compound interest -compare services available from financial institutions, and solve problems involving the cost of making purchases on credit -interpret information about owning and operating a vehicle, and solve problems involving the associated costs
Geometry & Trigonometry	-represent, in a variety of ways, two-dimensional shapes and three-dimensional figures arising from real-world applications, and solve design problems -solve problems involving trigonometry in acute triangles using the sine law and the cosine law, including problems arising from real-world applications
Data Management	-solve problems involving one-variable data by collecting, organizing, analyzing, and evaluating data -determine and represent probability, and identify and interpret its applications

SAMPLE RESOURCE MATERIALS

Textbook (in-school): *Foundations for College Mathematics 11, McGraw-Hill Ryerson, 2009*

Other: A scientific calculator is required for in-class assessments of learning (e.g., tests and performance-based tasks). Students are encouraged to use available technologies, including their own and where appropriate, to support their learning. Some suggested apps, other software, websites and videos are available at http://ltngdhs.weebly.com/tools--resources.html.

ASSESSMENT, EVALUATION, and MARK BREAKDOWN

Term Report		Final Report	
Knowledge & Understanding	25%	Term Work	70%
Thinking/Inquiring/Problem Solving	25%	Culminating Task	10%
Communication	25%	Exam	<u>20%</u>
Application	<u>25%</u>		100%
	100%		

To ensure that assessment and evaluation are valid and reliable, and that they lead to improvement of student learning in Mathematics, strategies will be used that:

-address both what students learn and how well they learn
-are varied in nature, administered over a long period of time, and designed to provide opportunities for students to demonstrate the full range of their learning
- students can use digital process portfolios to document their learning and choose projects that showcase their skills and understanding
-are appropriate for the learning activities used, the purpose of instruction, and the needs and experiences of the students
-are fair to all students
-ensure that each student is given clear directions for improvement
- students can then incorporate feedback into improving their learning
-promote students' ability to assess their own learning and set specific goals
- include the use of samples of students' work that provide evidence of their achievement

Additional Information concerning assessment practices, students and parents are encouraged to review http://ltngdhs.weebly.com/assessment.html.

CLASSROOM EXPECTATIONS

LESSONS & LEARNING OBJECTS:
-Details concerning what students are learning and objects (e.g., assignments, readings, videos, practice, etc.) that they can use to support their learning will be updated regularly and maintained in the form of a digital calendar. This calendar is linked off of the course webpage, but can be directly accessed at:

https://goo.gl/cyFfEA

Students are encouraged to use this table in keeping track of their learning in the course.

-Messaging service ("Remind"): Students and parents can use *Remind* to connect instantly with their teacher. This is a free, safe, and easy way to staying engaged with what's going on in class, receiving feedback on learning, and staying aware of important announcements.
- To register text the following message to 1-(514) 667-8787
  - Message: @ngmbf3ca

CLASSROOM EXPECTATIONS:
-It is important that we continuously show respect for ourselves, others, and both the learning environment and process.

-Our class is a community.
- Making mistakes is a natural part of the learning process. It is critical that we not only expect them but that we respect and inspect them.

- We learn to think and think about learning. Students are encouraged to follow mathematical participation goals.
- Being prepared for class helps us to move forward together. Assigned work is to be completed to the best of your ability and in a timely manner.
    - Use MSIP to your advantage and create opportunities at home when you know that you need to spend more time with a concept, assignment, etc.

-The use of cell phones (and other personal tech) is encouraged to assist students with learning mathematics but must be used for just that: as a learning tool
- Students are encouraged to pay attention to those days that are deemed "tech days" at the beginning of each class

EXTRA HELP:
Students who are having difficulties that aren't able to be resolved in class are encouraged to take advantage of extra help outside of class time. Assistance may be available from their MSIP teacher. Extra help will also be available, from the Math Department, over lunch and/or after school. Students are encouraged to speak to their teacher about arranging extra help sessions.

INSTRUCTOR CONTACT INFORMATION

E-mail address: christopher.stewart@ucdsb.on.ca

School phone: (613) 258-3481 x-3519

Complete, detach, and return the Agreement (below) to Mr. Stewart on or before **Monday, February 8th.**

AGREEMENT – MBF 3C (Period 3)

Parents/Guardians: Periodically, I like to send out e-mails regarding what students are learning, important dates, and other information. By providing your e-mail address, I can let you know what is happening in the course. Please return with your son/daughter to school or scan the completed form to christopher.stewart@ucdsb.on.ca. Thank you.

_____   _____
Student Name   Student Signature

_____   _____
Parent/Guardian Name   Parent/Guardian E-mail(s)

_____   _____
Parent/Guardian Phone Number(s)   Parent/Guardian Signature

_____
Date

At the beginning of the semester, I will be sending out a welcome email to parents.

Please check _____ if you **have** received the "Welcome to …" email.

Please check _____ if you **have not** received the "Welcome to …" email. If not, I will ensure that I have the correct email being used when corresponding with you.