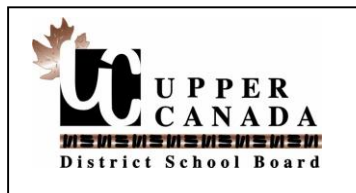


North Grenville District High School

Upper Canada District School Board

DATE: September 8, 2015



COURSE OUTLINE:

Course: MPM 2D1, Principles of Mathematics, Academic

Prerequisite: *Principles of Mathematics, Grade 9, Academic (MPM1D1)*

*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 relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems" (p46, [The Ontario Curriculum: Grades 9 and 10-Mathematics, Revised 2005](#)).

COURSE WEBSITE

Students and parents can access course information by going to www.ltngdhs.weebly.com and selecting MPM 2D from "Find Your Class".



AREAS/UNITS OF STUDY

Trigonometry	<ul style="list-style-type: none">-investigate similar triangles and solve problems related to similarity;-solve problems involving right triangles; and-solve problems involving acute triangles
Analytic Geometry	<ul style="list-style-type: none">-model and solve problems involving the intersection of two straight lines;-solve problems using analytic geometry involving properties of lines and line segments; and-verify geometric properties of triangles and quadrilaterals, using analytic geometry
Quadratic Functions	<ul style="list-style-type: none">-determine the basic properties of quadratic functions;-relate transformations of the graphs of quadratic functions to their algebraic representations;-solve quadratic equations; and-solve problems involving quadratic functions

SAMPLE RESOURCE MATERIALS

Textbook: *Principles of Mathematics 10, Nelson, 2010*

Other: A scientific calculator is required. Students are encouraged to use available technologies, including their own, 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
- 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
- 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](#) (also available using the QR code, see right). Students are encouraged to use this table in keeping track of their learning in the course.



CLASSROOM EXPECTATIONS: Early in the semester, students and their teacher will co-create a class code that focuses on how we will continuously show respect for ourselves, others, and both the learning environment and process. The class code will be posted on the [course webpage](#) and will be re-visited on an ongoing basis for additions and/or revisions. Parents are encouraged to discuss the code with their son/daughter as to how it will assist them and their peers to learn Mathematics.

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: days, time(s), and room number(s) will be communicated to students in class, to parents electronically, and posted on the [course webpage](#).

INSTRUCTOR CONTACT INFORMATION

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

School phone: (613) 258-3481



AGREEMENT – MPM 2D1

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

M.S.I.P. pd. _____, Room # _____

M.S.I.P Teacher _____

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