

# COURSE STATEMENT

## MPM 2D1

### LAMBTON CENTRAL COLLEGIATE AND VOCATIONAL INSTITUTE

G. Nemcek B.A., B.Ed.  
Principal

N. Jeffrey, B.Math, B.Ed.  
Vice Principal



Box 250  
Petrolia, Ontario  
N0N 1R0

Telephone:  
(519) 882-1910

Fax:  
(519) 882-1860

Welcome to Grade 10 Academic Mathematics. This is a summary sheet for parents and students which outlines our course evaluation and expectations.

**TEACHER:**

**TEXT: Principles of Mathematics 10**

**Course Name: Grade 10 Academic Mathematics**

**Course Code: MPM 2D**

**Credit Value: 1 credit**

**Ministry Document: The Ontario Curriculum Grades 9 and 10, Mathematics, 2005**

**Development Date: April, 2007**

**Mission Statement:**

Teachers at LCCVI are dedicated to providing the following:

- ✓ access for all students
- ✓ a safe learning environment
- ✓ quality educational opportunities
- ✓ high professional standards

**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.

**Overall and Specific Curriculum Expectations:**

Refer to the Ministry of Education document entitled "The Ontario Curriculum Grades 9 and 10, Mathematics, 2005 Revised" which is available in the main office, from your teacher, or on the Ministry of Education website (<http://www.edu.gov.on.ca/eng/curriculum/secondary/subjects.html>)

**Course Content Outline:**

**Quadratic Relations of the Form  $y = ax^2 + bx + c$**

- Determine the basic properties of quadratic relations;
- Relate transformations of the graph of  $y = x^2$  to the algebraic representation  $y = a(x - h)^2 + k$ ;
- Solve quadratic equations and interpret the solutions with respect to the corresponding relations;
- Solve problems involving quadratic relations.

**Analytic Geometry**

- Model and solve problems involving the intersection of two straight lines;
- Solve problems using analytic geometry involving properties of lines and line segments;
- Verify geometric properties of triangles and quadrilaterals, using analytic geometry.

## **Trigonometry**

- Use their knowledge of ratio and proportion to investigate similar triangles and solve problems related to similarity;
- Solve problems involving right triangles, using the primary trigonometric ratios and the Pythagorean theorem;
- Solve problems involving acute triangles, using the sine law and the cosine law.

### **Assessment and Evaluation Strategies:**

There are four achievement categories of knowledge and skills that encompass all the curriculum expectations in the Ontario Curriculum for MPM 2D1. The four categories and their value for the term are as follows:

<b>Knowledge</b>	<b>30%</b>
<b>Thinking</b>	<b>20%</b>
<b>Communication</b>	<b>20%</b>
<b>Application</b>	<b>30%</b>

**The breakdown of your mark will be based on your level of achievement as follows:**

### **Term Work – 70%**

The above achievement categories will be used to evaluate tests, quizzes, assignments, etc. as part of your term mark.

### **Final Examination / Culminating Activity – 30%**

*All students must participate in the culminating activity sometime during the last two weeks of the semester, where applicable, and / or write a final examination based on the entire semester's work during the end of semester exam period. There are no exemptions for this exam.*

### **Learning Skills**

Provincial Report Cards will be marked with each student's performance in the five Learning Skills areas:

1. Responsibility
2. Organization
3. Independent Work
4. Collaboration
5. Initiative
6. Self-Regulation

These Learning Skills will be assessed regularly by your teacher. They are an important statistic to understand how well students perform in the class. These are not considered in the determination of the final grade. For each of the Learning Skills one of the following achievement letters will be given:

**E = Excellent    G = Good    S = Satisfactory    N = Needs Improvement**

## **ATTENDANCE**

Regular attendance is vital to the process of learning. When the process and content of learning is disrupted by irregular attendance, both the individual and his/her classmates suffer a loss of experience that cannot be entirely regained. Students who miss class will suffer in the process because their participation and achievement cannot be fully assessed. Students are expected to complete any expectations missed due to absence.

## **ACADEMIC HONESTY**

### **Consequences for Academic Dishonesty on Assignments:**

Professional judgment of the teacher is taken into account to determine the degree of academic dishonesty and appropriate consequences.

**Grades 9 and 10** – Student will redo the assigned work. The student will receive a 25 per cent deduction on their assignment. If assignment is not completed and handed in within the time frame specified by the teacher, a mark of zero will be recorded. Subsequent occurrences may result in a mark of zero.

**Grade 11** - Student will redo the assigned work. The student will receive a 50 per cent deduction on their assignment. If assignment is not completed and handed in within the time frame specified by the teacher, a mark of zero will be recorded. Subsequent occurrences may result in a mark of zero.

**Grade 12** – A mark of zero will be assigned. There will be no opportunity for the assignment to be re-evaluated.

Note: Consequences may vary depending on the grade and level of a course.

### **Consequences for Academic Dishonesty on Tests:**

1. Teacher has a conversation with the student about the incident.
2. If cheating has been determined, the student is assigned a mark of zero.
3. Parents are informed if student is under 18 years old.
4. In Grades 9 to 12, administration is informed if situation is not resolved.

**Consequences for Academic Dishonesty on Exams:**

1. If cheating is suspected during the exam, student is allowed to complete exam.
2. If cheating has been determined during or after the exam there will be a conference involving administration, teacher and the student.  
A mark of zero will be assigned.
3. Parents are informed if student is under 18 years old.

**Appeals Process:** Appeals will be requested through the teacher to the administration if the situation is not resolved.

**LATE POLICY**

The staff and students of LCCVI recognize that deadlines need to be in place to help students develop time management skills and strategies. Where in the teacher's professional judgment it is appropriate to do so, a number of strategies may be used to help prevent and/or address late and missed assignments. Students are expected to submit all assignments within the time frame specified by the teacher. Teachers will consider extenuating circumstances when assignments are late. If an assignment is late, **10% MAY** be deducted per school day, up to a maximum of **30%**. Once assignments have been returned to students, any late submissions **MAY** receive a mark of zero.