## St. Thomas High School

## **Course Outline/Evaluation Criteria**

Teacher's Name:

Course:

Math 456

"Science Nature" (SN)

Wear:

Cycle 2 Year 2 (Secondary 4)

Program: IB IMM REG

Prerequisites: Math 306 or Math 386

**Objectives:** General Objectives:

- To encourage students to take an active part in their own learning
- To encourage students to use a problem-solving approach at every stage in the learning process
- To help students develop the ability to analyze statistical data
- To encourage students to use *appropriate* technology

\*IBO Program
Links

Approaches to Learning

- Problem solving techniques
- Choosing and representing relevant information
- Looking for and establishing patterns

## **Global Contexts**

- Orientation in time and Space Looking for and establishing patterns and relationships
- Scientific and Technical Innovation Real life applications of mathematical concepts
- Globalization and Sustainability Impact of decision-making on the environment

**Resources:** 

Math Help Services / Math 3000 4SN Workbook

**Materials:** 

One 200 page **quad** (with grids not lines) notebook for notes Extra looseleaf/graph paper (for rough work.homework)

1 ½ to 2" binder for handouts/tests, etc

Pencils, pens (3 different colours), eraser, ruler, highlighters, pencil case

Recommended: Scientific calculator (preferably CASIO with VPAM or SHARP with

DAL)

**Contact Information:** 

e-Mail: sbroden@lbpearson.ca

Website: http://msbro.weebly.com

#### **Content:**

- Algebraic Expressions
- Functions
- Analytic Geometry
- Systems of Equations
- Isometric & Similar Triangles
- Trigonometry
- Equivalent and Similar Figures
- Statistics

### **Evaluation Criteria:**

# Note: Grades will be posted on Managebac

Each term students will be evaluated through the use of a minimum of 3 tests.

Other evaluation methods may include:

- Quizzes and homework assignments
- Projects
- Learning Evaluation Situations / Situational Problems
- Mid-year Exam
- End of Year MINISTRY Exam (worth 50% of Competency 2 for the YEAR)
   (moderated by the Ministère de l'Éducation et de l'Enseignement supérieur MEESR)

### **Breakdown of Competencies**

<u>Competency 1</u> (weighted 30%) – Solves a Situational Problem

This is a dynamic process that involves constantly going back and forth among the problem-solving stages and calls for the ability to anticipate, use discernment and exercise critical judgment. *This competency will be evaluated in Terms 2 and 3*.

Competency 2 (weighted 70%) – Uses Mathematical Reasoning

This involves looking for patterns, describing, combining, inventing or visualizing in order to discover, verify, explain, justify, generalize or persuade. *This competency will be evaluated each term.* 

Terms 1 & 3: 15% Quizzes & MHS Assignments, 85% Tests

Term 2: 10% Quizzes and MHS Assignments, 40% Tests, 50% Midyear Exam

\*\* <u>Note</u>: despite each competency being weighted, grades for each competency will be reported out of 100.

### Missed Test Policy:

Any tests that are missed can <u>ONLY</u> be made up or omitted if:

- a) prior arrangements were made for a predictable absence
- b) evidence is supplied that the absence or tardiness was unavoidable, unpredictable and legitimate

Arrangements to catch up with work missed is entirely the responsibility of each student and is expected to be done, whenever possible, before the next class. If arrangements are not made within a reasonable time (a few days back) then the opportunity is lost and the score will remain as zero.

## Missed Quiz Policy:

Quizzes will not be made up. If the absence was legitimate, the quiz will not count.