

# St. Thomas High School

## Course Outline/Evaluation Criteria

**Teacher's Name:**

**S. Broden**

**Course:**

**Math 456 Science Option**

**Year:**

**2015-16**

**Level:**

**Cycle 2 Year 2 (Secondary 4)**

**Program:**

**IB**

**IMM**

**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 to Global Contexts**

**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 humankind and the environment (vice versa)

**Required Text:**

Math 3000 Science Option Workbook/Visions 4SN Vol 1&2

**Materials:**

2 Notebooks (spiral quad paper 200 pages) for notes & homework  
 Binder for handouts  
 Pencils, eraser, ruler  
 Scientific NON-GRAPHING calculator

**Evaluation Criteria:**

**Evaluation:**

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
- Mid-year and End of Year Application Exam
- Mid-year and End of Year Situational Problem Exam

## Breakdown of Competencies

**Competency 1** (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.  
Competency 1 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 enabling one to discover, verify, explain, justify, generalize or persuade. Competency 2 will be evaluated each term.

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

### Missed Assignment/Test Policy:

Any assignments, quizzes or tests that are missed can ONLY 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

An arrangement 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.**

### Content:

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

### Contact Info:

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