

Course Description

Subject: Mathematics 5 Class: Secondary 3A-B

Semester 1 / 2014

Code: MA 23101

Time: 80 PeriodsCredit: 2.0

Instructors: Ms. Marites Magsipoc & Ms. Thatsana Treekitja

Study Unit (Content)	Standard	Indicators		
1. Surface area and volume	M 6.1	Capacity for problem-solving, reasoning, and communication;		
1.1 Surfaces areas of prisms, cylinders,		communication and presentation of mathematical concepts; linking		
pyramids, cones and spheres. (Local)		various bodies of mathematical knowledge and linking mathematics with		
1.2 Volumes of prisms, cylinders,		other disciplines; and attaining ability for creative thinking		
pyramids, cones and spheres		m. 3/1 Apply diverse methods for problem-solving.		
		m. 3/4 Accurately and succinctly use mathematical language and		
		symbols for communication, communication of concepts and		
		presentation.		
	M 2.1	Understanding the basics of measurement; ability to measure and		
		estimate the size of objects to be measured		
		m.3/1 Find the surface area of prisms and cylinders. pyramids, cones		
		and spheres.		
		m.3/2 Find the volume of prisms, cylinders, pyramids, cones and		
		spheres		
2. Inequalities.	M 6.1	Capacity for problem-solving, reasoning, and communication;		
2.1 Linear inequality with one variable.		communication and presentation of mathematical concepts; linking		
2.2 Solving linear inequality with one		various bodies of mathematical knowledge and linking mathematics with		
variable.		other disciplines; and attaining ability for creative thinking		
2.3 Solving problems linear inequality		m. 3/1 Apply diverse methods for problem-solving.		
with one variable.		m. 3/4 Accurately and succinctly use mathematical language and		
		symbols for communication, communication of concepts and		
		presentation.		
	M4.2	Ability to apply algebraic expressions, equations, inequalities, graphs		
		and other mathematical models to represent various situations, as		
		well as interpretation and application for problem-solving		
		m.3/1 Apply knowledge of linear inequalities with one variable for		

		problem-solving, as well as be aware of the validity of the answer.
3. linear equations with two	M 4.2	Ability to apply algebraic expressions, equations, inequalities, graphs
variables		and other mathematical models to represent various situations, as
3.1 Graphing Linear Equations		well as interpretation and application for problem-solving.
3.2 Linear graphs of 2 unknown		m.3/2 Write a graph showing link of two sets of quantities with linear
3.3 Slope-Intercept Form		relationship.
		m.3/3 Draw graphs of linear equations with two variables.
4. Systems of Linear Equations.	M 4.2	Ability to apply algebraic expressions, equations inequalities ,graphs
4.1 Systems of linear equations with 2		and other mathematical models to represent various situations, as
variables.		well as interpretation and application for problem-solving.
4.2 Solving systems of linear equations		m.3/3 Draw graphs of linear equations with two variables.
with 2 variables and graph.		m.3/5 Solve systems of linear equations with two variables which can
4.3 Using systems of linear equations		be applied for problem-solving, as well as be aware of the validity of
with 2 variables to solve problems.		the answer.

Measurement and Evaluation

Total score 100 points (Assessment 60 : Midterm / Final test 40)

Measurement and	Evaluation	Assessment tool	Points	Expected outcomes
Evaluation	Methods			
1. Pre - Midterm	1. Test	1. Real Objects	15	M 6.1 m. 3/1
	2. Project	2. Project Making	5	M 6.1 m. 3/4
	3.Presentation	Criteria	5	M2.1 m.3/1-2
		3. Presentation		M 4.2 m.3/1
		Making Criteria		
2, Midterm Test	Tests	Examination	20	M2.1 m.3/1-2
				M4.2 m.3/1

3. Post - Midterm	1. Test	1. Worksheets	15	M4.2 m.3/2 ,
	2. Project	2. Project Making	5	m.3/3 , m.3/5
	3.Presentation	Criteria	5	
		3. Presentation		
		Making Criteria		
4. Final Test	Tests	Examination	20	M4.2 m.3/2 , m.3/3 , m.3/5
5. Desirable	1. Observe	Observation	10	1.Love of nation, religion and
Characteristics				king
				2. Honesty and integrity
				3. Self-discipline
				4. Avidity of learning
				5. Being Economy philosophy
				sufficiency
				6. Responsibility and commitment
				to work
				7. Cherishing thai-ness
				8. Public-mindedness
				9. Awareness of drugs and
				vice
				10. Assertive leadership
6. Competencies	- Test		-	1. Communication Capacity.
	- Recitation	Examination		2. Thinking Capacity
	- Presentation	Worksheets		3. Problem Solving Capacity
				4. Capacity for technology
		- Rubrics		Application
				5. Capacity for Applying Life
				Skills
7. Analytical reading	- Solving Word	- Worksheets	-	1. Understand the concept of the
and writing	Problems			word problem read.
				2. Utilize mathematics in a
				practical way by finding solution to
				real world problems.