Course Description

Subject: Practical Mathematics 5   **Code:** MA 23202   **Time:** 40 Periods   **Credit:** 1.0

Class: Secondary 3A-B   **Semester:** 1 / 2014   **Instructors:** Ms. Marites Magsipoc & Ms. Thatsana Treekitja

Study Unit (Content)	Expected outcomes
1. Radical (squares root)	Students should be able to
1.1 Rules of square root when $.A \geq 0$	1. Use the rules of $\sqrt{a}$ when $a \geq 0$ to solve problems.
1.2 Proceeding with real numbers about square root.	2. Add, subtract, multiple and divide of square root.
1.3 Using of square root to solve problems.	3. Use the knowledge about the square root to solve problems.
2. Factorization of polynomials	
2.1 Factoring second degree polynomials in difference of squares.	4. Factor of polynomial expressions with degree 2 by using the difference of squares method.
2.2 Factoring polynomials with degree greater than 2 and integer co-efficient for using several different methods.	5. Factor of polynomial expressions with degree 2 by multiplying the distribution
2.3 Factoring second degree polynomials in perfect square.	6. Factor of polynomial expressions with degree 2 by using perfect square method.
3. Quadratic equations	
3.1 Revision of factorization of polynomials	

Study Unit (Content)	Expected outcomes
3.2 Solving quadratic equations by using perfect square.	7. Solve quadratic equation with one variable by factoring
3.3 Solving problems of quadratic equations. (Local)	8. Solve problems quadratic equation with one variable by factoring.

Measurement and Evaluation

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

Measurement and Evaluation	Evaluation Methods	Assessment tool	Points	Expected outcomes
1. Pre - Midterm	1. Test 2. Project	1. Worksheets 2. Project Making Criteria	15 10	1, 2, 3
2, Midterm Test	- Video Presentation - Oral Test	-Teamwork Criteria Assessment - Interview	15 5	4, 5, 6
3. Post - Midterm	1. Test 2. Project	1. Worksheets 2. Project Making Criteria	15 10	7, 8
4. Final Test	Tests	Examination	20	7, 8

Measurement and Evaluation	Evaluation Methods	Assessment tool	Points	Expected outcomes
5. Desirable Characteristics	1. Observe	1. Observation	10	1.Love of nation, religion and 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 - Recitation - Presentation	- Examination - Worksheets - Rubrics	-	1. Communication Capacity. 2. Thinking Capacity 3. Problem Solving Capacity 4. Capacity for technology Application 5. Capacity for Applying Life Skills
7. Analytical reading and writing	- Solving Word Problems	- Worksheets	-	1. Understand the concept of the word problem read. 2. Utilize mathematics in a practical way by finding solution to real world problems.

Teamwork Criteria Assessment

Evaluation Criteria: 1 - never

2 - sometimes

3 - always

	Student	Willingness to work with other	Engage in a constructive comment.	Cooperate and help others in their work.	The ability to communicate with fellow students / teachers appropriately.	Express constructive criticism	Total15	Average
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								