Republic of the Philippines

**CvSU Mission**

Cavite State University shall provide excellent, equitable and relevant educational opportunities in the arts, sciences and technology through quality instruction and responsive research and development activities. It shall produce professional, skilled and morally upright individuals for global competitiveness.

### CvSU Vision

The premier University in historic Cavite recognized for excellence in the development of globally competitive and morally upright individuals.

**CAVITE STATE UNIVERSITY**



**Carmona Campus**

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**Department of General Education**

COURSE SYLLABUS

First Semester, Academic Year 2014 - 2015

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Instructor : Still John F. Reyes Mobile Number :

Office Location : Market Drive, Carmona, Cavite E-mail Address : ­­­stilljohnreyes@yahoo.com

Office Phone Number : (046) 430-3509 Consultation Hours : Wed. 11:30 – 1:30

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Course Code : MATH 3

**Course Title** **:** College Algebra with Trigonometry

**Course Description :** This course includes sets and real numbers, special product and factoring, rational expressions, functions and relations; rational, linear, quadratic and exponential functions including inverse functions, graphs, circular and trigonometric functions and equations.

**Program :** Bachelor of Science in Business Management

**Curriculum Year :** 1st Year

Credit Unit : 3

Credit Hours

Lecture : 3

Laboratory : 0

Prerequisite : None

**Course Objectives :** At the end of the course, with 75% accuracy, the students are expected to:

1. use the basic concepts and operations of algebra in working with polynomials, rational expressions, linear and quadratic equations and trigonometric functions;
2. construct graphs of linear and quadratic equations, circular and inverse functions;
3. apply the various concepts and principles of algebra and trigonometry in their respective disciplines; and
4. develop cooperation and appreciation of the values for effective learning as reflected in the performance of the learner.

**Core Values :** Students are expected to live by and stand for the following University tenets:

TRUTH is demonstrated by the student’s objectivity and honesty during examinations, class activities and in the development of projects.

EXCELLENCE is exhibited by the students’ self-confidence, punctuality, diligence and commitment in the assigned tasks, class performance and other course requirements.

SERVICE is manifested by the students’ respect, rapport, fairness and cooperation in dealing with their peers and members of the community.

In addition, they should exhibit love and respect for nature and support for the cause of humanity.

Course Content No. of Hours

Overview of the Course

1. Sets and Real Numbers 3.0
2. Concepts on Sets
3. Operations on Sets
4. The Real Number System: Properties
5. Algebraic Expressions 6.0
6. Definition of Algebraic Expressions
7. Operations on Algebraic Expressions
8. Addition and Subtraction
9. Multiplication and Division

***First Long Examination*  1.5**

1. Special Products and Factoring 9.0
2. Special Products
3. Product of a Monomial and Binomial
4. Product of Two Binomials
5. Square of a Binomial
6. Cube of a Binomial
7. Square of a Trinomial
8. Factoring
9. Common Monomial
10. Difference of Two Squares
11. Sum and Difference of Two Cubes
12. Perfect Square Trinomial
13. General Trinomial
14. Factoring by Grouping
15. Completing the Squares

***Midterm Examination*  3.0**

1. Rational Expressions 6.0
2. Review on Fractions
3. Definition of Rational Expressions
4. Operations on Rational Expressions
5. Functions and Their Graphical Representation 3.0
6. Functional Notation
7. Operations on Functions
8. Inverse Functions

*Second Long Examination* 1.5

1. The Circular Functions 12.0
2. Definition of Trigonometry
3. Circular Functions
4. Special Real Numbers
5. The Fundamental Circular Function Identities
6. Trigonometric Functions 6.0
7. Trigonometric Functions
8. Trigonometric Equations

***Final Examination*  3.0**

**Total Hours: 54.0**

Teaching Methods / Learning Activities:

Lecture – Discussion (suggested for all topics) Board work (suggested for all topics)

Problem solving (suggested for all topics) Team Teaching (suggested for all topics)

Cooperative Learning (suggested for all topics) Interactive Learning (suggested for all topics)

Brainstorming (suggested for I & V) Multi-media (suggested for I & VI)

Graphmatica (suggested for VI) Lecture-Seminar (suggested for VI & VII)

Instructional Materials and Equipment:

Lecture-handouts Laptop / computer with LCD projectors

Softwares (Graphic Utilities)

Colored chalks, chalkboard, markers, whiteboard and graphing board

Textbooks/References:

Alferez, M. and Ma. Cecilia Duro (2004) *MSA Advanced Algebra with Trigonometry*.

Quezon City, MSA Academic Advancement Institute.

Beecher, J. A. (2007) 3rd ed. *Algebra and Trigonometry*. Addison Wesley.

Borro, (2005) *College Algebra: A Simplified Approach.*

Greenleaf, Newcomb. *Trigonometry with Applications*. Brooks/Cole Publishing Company, 2001

Larson, Ron.(2001) *Algebra and Trigonometry*. 5th edition. c2001

Leithold, L. (2001) *College Algebra and Trigonometry.*

Mijares, C. D. (2006*) College Algebra*, Mandalutong City. National Bookstore Inc.

Sullivan, M. & Sullivan III, M. (2006*). Algebra and Trigonometry: Enhanced with*

*Graphing Utilities***,** 4th Ed. New Jersey: Pearson Prentice Hall

Wokowski, E. & Cole, J.(2002) *Algebra & Trigonometry with Analytic Geometry***.** 10th Ed.

California. Wadsworth group, Thompson Learning, Inc.

**Course Requirements** **:** Class Participation

Examinations/Quizzes

Worksheets and Problem Sets

**Evaluation of Student Performance / Grading :**

**CLASS STANDING** **60%**

Worksheets 50%

Problem Sets 25%

Class Participation 15%

Attendance 10%

**COMPREHENSIVE EXAM** **40%**

1st Long Exam 20%

Midterm Exam 30%

2nd Long Exam 20%

Final Exam 30%

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**100%**

**RATING SCALE: \*\*\***

96.72 - 100.00 1.00

93.38 - 96.71 1.25

90.04 - 93.37 1.50

86.70 - 90.03 1.75

83.36 - 86.69 2.00

80.02 - 83.35 2.25

76.68 - 80.01 2.50

73.34 - 76.67 2.75

70.00 - 73.33 3.00 Passing Grade

66.67 - 69.99 4.00 Conditional

Below- 66.66 5.00 Failed

**\*\*\*Uses the absolute grading system**

**Course Policies**

1. Attendance
2. Students are not allowed to have 20% or more absences of the total class hours; otherwise, they will be graded as follows:
3. Dropped (if majority of the excessive absences are excused)
4. Failed (if majority of the excessive absences are unexcused)
5. Classroom Decorum

Students are required to:

1. Wear their identification cards and observe proper dress code at all times;
2. Turn off or put in silent mode their cellular phones during class hours;
3. Maintain cleanliness and orderliness of the room at all times; and
4. Come to class on time.
5. Examination/Evaluation
6. Long examinations and quizzes are always announced.
7. Cheating is strictly prohibited. A student who is caught cheating will be given a score of “0” for the first offense. He/she will automatically be given a grade of 5.0 for the second offense.
8. Examination permits are required during midterm and final examinations.
9. Students who missed exams, exercises, or quizzes may only be excused for any of the following reasons:
10. Participation in a University/College-approved field trip or activity (must be cleared one week in advance);
11. Personal illness (must present medical certificate); and
12. Death or serious illness in the immediate family.

Prepared by: Reviewed by: Approved by:

STILL JOHN F. REYES SHIELA L. VIDALLON YOLANDA A. ILAGAN, Ph.D.

Instructor Chair, Dept. of Gen. Educ. Campus Dean