GAVILAN COLLEGE

5055 Santa Teresa Blvd
Gilroy, CA 95023

Course Outline

COURSE: MATH 217   DIVISION: 10   ALSO LISTED AS:

TERM EFFECTIVE: Spring 2023   CURRICULUM APPROVAL DATE: 4/11/2023

SHORT TITLE: PREP FOR TRANSFER LEVEL MATH

LONG TITLE: Preparation for Transfer Level Math

Units	Number of Weeks	Type	Contact Hours/Week	Total Contact Hours
1 TO 3	18	Lecture:	1 TO 3	18 TO 54
		Lab:	0	0
		Other:	0	0
		Total:	1 TO 3	18 TO 54
		Total Learning Hrs:	54 TO 162	

COURSE DESCRIPTION:

An intensive mathematics course designed for those students who need to refresh the fundamental math concepts needed for transfer level Math classes. The primary emphasis is on percentages, algebraic expressions, linear/quadratic equations and applications, slopes of lines, polynomials, graphing, and functions, plus working with data. This is a pass/no pass course. This class is intensive preparation for MATH 5, MATH 6, MATH 7 and MATH 8A.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: T - Support - Degree Applicable

GRADING MODES
        P - Pass/No Pass

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:
        02 - Lecture and/or discussion
        05 - Hybrid
        71 - Dist. Ed Internet Simultaneous
        72 - Dist. Ed Internet Delayed

STUDENT LEARNING OUTCOMES:

By the end of this course, a student should:

1. Analyze and solve linear equations in one and two variables.
2. Solve a variety of problems involving applications of linear and quadratic functions.
3. Identify and solve quadratic equations.
4. Graph linear and non-linear relations and utilize the graph in problem solving.

COURSE OBJECTIVES:

By the end of this course, a student should:

1. Perform operations with fractions and rational expressions.
2. Convert percents to decimals to fractions, fractions to percents and vice versa.
3. Set up proportions to solve application problems.
4. Evaluate formulas.
5. Solve a wide variety of linear equations.
6. Create ordered pairs and plot points based on given relations.
7. Solve linear equations with two variables.
8. Create graphs representing real life situations.
9. Solve application problems using linear equations.
10. Identify and evaluate the slope of a line in application problems.
11. Collect data and analyze graphs based on these data.
12. 2 unit: Solve application problems involving linear equations and systems of linear equations.
13. 2 unit: Find the sum, difference, product and composition of two functions.
14. 2 unit: Identify functions and find their find the domain and range,
15. 2 unit: Find the equation of a line given: a) slope and y-intercept, b) point and slope, c) two points, and d) other types of information about the line.
16. 2 unit: Solve systems of equations using graphing, substitution, and elimination.
17. 3 unit: Solve application problems involving polynomials.
18. 3 unit: Solve polynomial equations by factoring and by using the quadratic formula.
19. 3 unit: Factor polynomials by factoring out the greatest common factor, grouping, and special products.
20. 3 unit: Add, subtract, multiply, and divide polynomials.

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Curriculum Approval Date: 4/11/2023

1 Unit Class:

4 hours

Content: Fractions, percentages, solving real life problems involving percentages.

5 Hours

Content: Solving linear equations and formulas, solving real life problems based on linear equations.

7 Hours

Content: Solving linear equations in two variables, Cartesian system of coordinates, graphing linear and non-linear relations,

collecting data and working with data.

2 hours

Final Exam

2 Unit Class

Covers all the topics of 1 unit class plus:

6 Hours

Content: Slopes, intercepts, equations of a line, applications

6 Hours

Content: Functions, inverse functions, domains and ranges of the relations, inverse functions, compositions of functions.

6 Hours

Content: Solving systems of equations in two and three variables and applications.

3 Unit Class

Covers all the topics of 2 Unit class plus:

5 Hours

Content: Operations with polynomials.

6 Hours

Content: Factoring polynomials.

7 Hours

Content: Solving polynomial equations and applications involving polynomial equations.

METHODS OF INSTRUCTION:

Instruction will follow a standard lecture/discussion format. Extensive homework will be assigned in order to assure mastery of the concepts covered in class. Students will be given opportunities to work together on problems given in class and group projects.

OUT OF CLASS ASSIGNMENTS:

Required Outside Hours 36

Assignment Description

1 unit

1. Analyze and study pertinent text material, solved examples and lecture notes.

2. Apply principles and skills covered in class by solving regularly-assigned homework problems.

3. Regularly synthesize course materials in preparation for exams.

Required Outside Hours 72

Assignment Description

2 units

1. Analyze and study pertinent text material, solved examples and lecture notes.

2. Apply principles and skills covered in class by solving regularly-assigned homework problems.

3. Regularly synthesize course materials in preparation for exams.

Required Outside Hours 108

Assignment Description

3 units

1. Analyze and study pertinent text material, solved examples and lecture notes.

2. Apply principles and skills covered in class by solving regularly-assigned homework problems.

3. Regularly synthesize course materials in preparation for exam

METHODS OF EVALUATION:
Problem-solving assignments
Evaluation Percent 90
Evaluation Description
Homework problems; Group assignments
Objective examinations
Evaluation Percent 10
Evaluation Description
Written exams; Quizzes

REPRESENTATIVE TEXTBOOKS:
Beginning and Intermediate Algebra, Lial/Hornsby/McGinnis, Pearson, 2019 or a comparable textbook/material.
ISBN: ISBN-10 : 013489599,1 ISBN-13 : 978-0134895994
7th Grade Verified by: Elena Dachkova

ARTICULATION and CERTIFICATE INFORMATION
       Associate Degree:
       CSU GE:
       IGETC:
       CSU TRANSFER:
              Not Transferable
       UC TRANSFER:
              Not Transferable

SUPPLEMENTAL DATA:
Basic Skills: N
Classification: Y
Noncredit Category: Y
Cooperative Education: N
Program Status: 2 Stand-alone
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department:
CSU Crosswalk Course Number:
Prior to College Level: A- 1 level below transferable lvl
Non Credit Enhanced Funding: N
Funding Agency Code:
In-Service: N
Occupational Course: E
Maximum Hours:
Minimum Hours:
Course Control Number: CCC000637651
Sports/Physical Education Course: N
Taxonomy of Program: 170100