

I. CATALOG INFORMATION

- A. Discipline: MATHEMATICS
- B. Subject Code and Number: MATH M901
- C. Course Title: Bridge to Elementary Algebra (MATH M01)

- D. Credit Course units:
 Units: _____
 Lecture Hours per week: 0.46
 Lab Hours per week : 0
 Variable Units : No

- E. Student Learning Hours:
 Lecture Hours:
 Classroom hours: 8.05 - 8.05
 Laboratory/Activity Hours:
 Laboratory/Activity Hours 0 - 0

Total Combined Hours in a 17.5 week term: 8.05 - 8.05

- F. Non-Credit Course hours per week _____

- G. May be taken a total of: 1 2 3 4 time(s) for credit

- H. Is the course co-designated (same as) another course: No Yes
 If YES, designate course Subject Code & Number: _____

- I. Course Description:

Prepares student for the prerequisite materials necessary to be successful in Math M01. Includes fractions, decimals, exponents, and solving linear equations.

- J. Entrance Skills

*Prerequisite: No Yes Course(s)

*Corequisite: No Yes Course(s)

Limitation on Enrollment: No Yes

Recommended Preparation: No Yes Course(s)

Other: No Yes

- K. Other Catalog Information:

II. COURSE OBJECTIVES

Upon successful completion of the course, a student will be able to:

		Methods of evaluation will be consistent with, but not limited by, the following types or examples.
1	add, subtract, multiply, and divide whole numbers, including multi-digit numbers when carrying and borrowing may be necessary, using the properties of numbers.	Lecture discussions Problems Group work
2	perform several arithmetic operations in the proper order and evaluate whole number exponents.	Lecture discussions Problems Group work
3	solve application problems using the basic math operations and check answers.	Lecture discussions Problems Group work
4	add, subtract, multiply, or divide two or three signed numbers with the same or different signs. Calculate with signed numbers using more than one operation.	Lecture discussions Problems Group work
5	use fractions to represent data from applied situations.	Lecture discussions Problems Group work
6	write a number as a product of prime numbers, reduce fractions, and determine if two fractions are equivalent.	Lecture discussions Problems Group work
7	change between a mixed number and an improper fraction and reduce. Multiply and divide mixed numbers and fractions that are proper or improper.	Lecture discussions Problems Group work
8	find the least common denominator given two or three fractions and convert a fraction to an equivalent fraction with a given denominator. Add and subtract mixed numbers and fractions with or without a common denominator.	Lecture discussions Problems Group work
9	change between fractional and decimal notation. Compare decimals, order decimals, and round decimals to a specified decimal place. Add, subtract, multiply, and divide decimals. Solve applied problems using operations with decimals.	Lecture discussions Problems Group work

10	change a percent, decimal, or a fraction to equivalent forms.	Lecture discussions Problems Group work
11	combine like terms containing a variable and apply the distributive property.	Lecture discussions Problems Group work
12	Solve linear equations using two steps.	Lecture discussions Problems Group Work

III. COURSE CONTENT

Estimated %	Topic	Learning Outcomes
Lecture (must total 100%)		
25.00%	Whole Numbers 1. Addition, subtraction, multiplication and division whole numbers 2. Exponents and order of operations	1, 2
25.00%	Signed Numbers 1. Addition and subtraction of signed numbers 2. Multiplication and division of signed numbers 3. Order of operations with signed numbers	3, 4
25.00%	Fractions 1. Simplifying fractions 2. Improper fractions and mixed numbers 3. Multiplication and division of fractions and mixed numbers 4. The least common denominator and building up fractions 5. Addition and subtraction of fractions	5, 6, 7, 8, 9, 10
25.00%	Introduction to Algebra 1. Variables and like terms 2. The distributive property 3. Solve equations using the addition property 4. Solve equations using the multiplication or division property 5. Solve equations using two properties	11, 12

IV. TYPICAL ASSIGNMENTS

A. Writing assignments

Writing assignments are required. Possible assignments may include, but are not limited to:	
1	problems selected from the bridge packet where answers require a written explanation of the solution such as solving an equation.
2	assignments requiring complete solutions using both written English and symbolic mathematical language.

B. Appropriate outside assignments

Appropriate outside assignments are required. Possible assignments may include, but are not limited to:	
1	assigned reading from bridge packet.

2	problems selected from the bridge packet where answers require a written explanation of the solution such as solving an equation.
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C. Critical thinking assignments

Critical thinking assignments are required. Possible assignments may include, but are not limited to:	
1	apply analytic techniques for solving mathematical and application problems.
2	compare and contrast methods of solution to mathematical problems.
3	describe and apply the algorithmic steps for obtaining the solution to a mathematical problem.

V. METHODS OF INSTRUCTION

Methods of instruction may include, but are not limited to:

- Distance Education – When any portion of class contact hours is replaced by distance education delivery mode (Complete DE Addendum, Section XV)
- Lecture/Discussion
- Laboratory/Activity
- Other (Specify)
 Analyze mathematical topics, provide detailed step-by-step examples
 Provide practice problems to develop proper mathematical skills and techniques
 Provide student interaction for questions and answers
 Using projects and/or group work to enhance student understanding of the concepts
Discuss application problems
- Optional Field Trips
- Required Field Trips

VI. METHODS OF EVALUATION

Methods of evaluation may include, but are not limited to:

- | | | |
|---|--|---|
| <input type="checkbox"/> Essay Exam | <input checked="" type="checkbox"/> Classroom Discussion | <input checked="" type="checkbox"/> Skill Demonstration |
| <input type="checkbox"/> Problem Solving Exam | <input type="checkbox"/> Reports/Papers/Journals | <input type="checkbox"/> Participation |
| <input type="checkbox"/> Objective Exams | <input type="checkbox"/> Projects | <input checked="" type="checkbox"/> Other (specify) |

Group work

Board work

VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS

Tussy, Alan S., and Diane R. Koenig. Prealgebra. 6th ed. Brooks Cole, 2018.

Miller, Julie, Molly O'Neill, and Nancy Hyde. Prealgebra. 2nd ed. McGraw-Hill, 2015.

Authors: Rena Petrello and Renee Butler
 Bridge To Math M01 Elementary Algebra Workbook

Nonpublished

VIII. STUDENT MATERIALS FEES

No Yes

IX. PARALLEL COURSES

College	Course Number	Course Title	Units
College of the Canyons	NCBS 401B	Mathematical Foundations for College Part II	0

X. MINIMUM QUALIFICATIONS

Courses Requiring a Masters Degree:
 Master's in mathematics or applied mathematics OR Bachelor's in either of the above AND Master's in statistics, physics, or mathematics education

XI. ARTICULATION INFORMATION

A. Title V Course Classification:

1. This course is designed to be taken either:

- Pass/No Pass only (no letter grade possible); or
- Letter grade (P/NP possible at student option)

2. Degree status:

Either Associate Degree Applicable; or Non-associate Degree Applicable

B. Moorpark College General Education:

1. Do you recommend this course for inclusion on the Associate Degree General Education list?

Yes: No: If YES, what section(s)?

- A1 - Natural Sciences - Biological Science
- A2 - Natural Sciences - Physical Science
- B1 - Social and Behavioral Sciences - American History/Institutions
- B2 - Social and Behavioral Sciences - Other Social Behavioral Science
- C1 - Humanities - Fine or Performing Arts
- C2 - Humanities - Other Humanities
- D1 - Language and Rationality - English Composition
- D2 - Language and Rationality - Communication and Analytical Thinking
- E1 - Health/Physical Education
- E2 - PE or Dance
- F - Ethnic/Gender Studies

C. California State University(CSU) Articulation:

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1. Do you recommend this course for transfer credit to CSU? Yes: No:

2. If YES do you recommend this course for inclusion on the CSU General Education list?

Yes: No: If YES, which area(s)?

A1 A2 A3 B1 B2 B3 B4

C1 C2 D1 D2 D3 D4 D5

D6 D7 D8 D9 D10 E

D. University of California (UC) Articulation:

1. Do you recommend this course for transfer to the UC? Yes: No:

2. If YES do you recommend this course for the Intersegmental General Education Transfer Curriculum (IGETC)? Yes: No:

IGETC Area 1: English Communication

- English Composition
- Critical Thinking-English Composition
- Oral Communication

IGETC Area 2: Mathematical Concepts and Quantitative Reasoning

- Mathematical Concepts

IGETC Area 3: Arts and Humanities

- Arts
- Humanities

IGETC Area 4: Social and Behavioral Sciences

- Anthropology and Archaeology
- Economics
- Ethnic Studies
- Gender Studies
- Geography
- History
- Interdisciplinary, Social & Behavioral Sciences
- Political Science, Government & Legal Institutions
- Psychology
- Sociology & Criminology

IGETC Area 5: Physical and Biological Sciences (mark all that apply)

- Physical Science Lab or Physical Science Lab only (none-sequence)

- Physical Science Lecture only (non-sequence)
- Biological Science
- Physical Science Courses
- Physical Science Lab or Biological Science Lab Only (non-sequence)
- Biological Science Courses
- Biological Science Lab course
- First Science course in a Special sequence
- Second Science course in a Special Sequence
- Laboratory Activity
- Physical Sciences

IGETC Area 6: Language other than English

- Languages other than English (UC Requirement Only)
- U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)
- U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)

XII. REVIEW OF LIBRARY RESOURCES

- A. What planned assignment(s) will require library resources and use?

The following assignments require library resources:

Using the Library's print and online resources to provide support material for algebraic content and real world applications. May want to make use of the math textbooks On Reserve in Circulation.

- B. Are the currently held library resources sufficient to support the course assignment?

YES: NO:

If NO, please list additional library resources needed to support this course.

XIII. PREREQUISITE AND/OR COREQUISITE JUSTIFICATION

MATH M901: Not Applicable

XIV. WORKPLACE PREPARATION

MATH M901: Not Applicable

XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM

MATH M901: Not Applicable

XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM

MATH M901: Not Applicable

XVII. STUDENT MATERIALS FEE ADDENDUM

MATH M901: Not Applicable

XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

MATH M901: Not Applicable

XIX. CURRICULUM APPROVAL

Course Information:

Discipline: MATHEMATICS

Discipline Code and Number: MATH M901

Course Revision Category: New Course

Course Proposed By:

Originating Faculty Cindy Reed 06/19/2017

Faculty Peer: Christine Cole 06/20/2017

Curriculum Rep: Thanh Trinh 07/15/2017

Department Chair: Christine Cole 06/20/2017

Division Dean: Mary Rees 06/20/2017

Approved By:

Curriculum Chair: Jerry Mansfield 10/13/2017

Executive Vice President: Julius Sokenu 10/16/2017

Articulation Officer: Letrisha Mai 09/21/2017

Librarian: Mary LaBarge 09/20/2017

Implementation Term and Year: Fall 2018

Approval Dates:

Approved by Moorpark College Curriculum Committee: 10/03/2017

Approved by Board of Trustees (if applicable): 12/12/2017

Approved by State (if applicable): 04/27/2018