LS M07B: BASIC MATH SKILLS II

Originator
slbassi

Co-Contributor(s)

Name(s)
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College
Moorpark College

Discipline (CB01A)
LS - Learning Skills

Course Number (CB01B)
M07B

Course Title (CB02)
Basic Math Skills II

Banner/Short Title
Basic Math Skills II

Credit Type
Credit

Start Term
Spring 2020

Catalog Course Description
Develops further foundational math concepts for students with math anxiety, or who have difficulty understanding and applying mathematical concepts. Includes percents, proportions, measurement, signed number arithmetic, and basic algebra. Expands on previous math test-taking strategies and mnemonic skills for learning and recalling math operations that can be used in subsequent math courses.

Additional Catalog Notes
Provides instruction designed to meet the educational needs of students with or without disabilities. Does NOT apply to Associate Degree.

Taxonomy of Programs (TOP) Code (CB03)
4930.32 - Learning Skills, Learning Disabled

Course Credit Status (CB04)
C (Credit - Not Degree Applicable)

Course Transfer Status (CB05) (select one only)
C (Not transferable);

Course Basic Skills Status (CB08)
B - The Course is a Basic Skills Course

SAM Priority Code (CB09)
E - Non-Occupational

Course Cooperative Work Experience Education Status (CB10)
N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)
Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)
S - The Course is an Approved Special Class

Course Prior to Transfer Level (CB21)
Y - Not Applicable

Course Noncredit Category (CB22)
Y - Credit Course

Funding Agency Category (CB23)
Y - Not Applicable (Funding Not Used)

Course Program Status (CB24)
2 - Not Program Applicable

General Education Status (CB25)
Y - Not Applicable

Support Course Status (CB26)
N - Course is not a support course

Field trips
Will not be required

Grading method
Letter Graded

Alternate grading methods
Student Option- Letter/Pass
Pass/No Pass Grading

Does this course require an instructional materials fee?
No

Repeatable for Credit
No

Is this course part of a family?
No

Units and Hours

Carnegie Unit Override
No

In-Class

Lecture
Minimum Contact/In-Class Lecture Hours
52.5
Maximum Contact/In-Class Lecture Hours
52.5

Activity

Laboratory

Total in-Class

Total in-Class
Total Minimum Contact/In-Class Hours
52.5

Total Maximum Contact/In-Class Hours
52.5

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Unpaid

Total Outside-of-Class

Total Outside-of-Class
Minimum Outside-of-Class Hours
105
Maximum Outside-of-Class Hours
105

Total Student Learning

Total Student Learning
Total Minimum Student Learning Hours
157.5
Total Maximum Student Learning Hours
157.5

Minimum Units (CB07)
3
Maximum Units (CB06)
3

Advisories on Recommended Preparation
LS M07A - Basic Math Skills I

Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	prepare for upcoming exams by creating a pre-test for the exam.
2	fill out a Grade Monitor with their returned tests and assignments. At the end of the semester, they will be able to determine how many points they need on the final exam to get the grade they want in the class.
3	understand the financial ramifications of borrowing money when Simple Interest is applied.

Course Objectives

	Upon satisfactory completion of the course, students will be able to:
1	organize and manage an academic binder.
2	apply learning styles and strategies.
3	apply strategies to reduce math test anxiety.
4	use mnemonic strategies to remember math formulas.
5	set up and simplify ratios.
6	solve proportions.
7	select between decimals, fractions, and percents.
8	solve word problems involving proportions, percents, and simple interest.
9	evaluate units of measurement within both the U.S. and metric systems.
10	differentiate between the U.S.and metric systems of measurement and systems of temperature measurement.
11	solve mean and median problems.
12	solve addition, subtraction, multiplication and division problems using signed numbers.

13	apply the order of operations when solving algebraic problems.
14	solve equations using the properties of addition, subtraction, multiplication, and division.
15	solve algebraic word problems.

Course Content

Lecture/Course Content

1. (15%) - Organization and Study Skills
Binder organization
Learning styles and strategies
Test anxiety
Mnemonic strategies

2. (25%) - Ratios, Proportions, and Percents
Ratios
Proportions
Percents
Converting between decimals, fractions, and percents
Applications involving proportions, percents, and simple interest

3. (35%) - Algebra
Signed numbers
Adding, subtracting, multiplying, and dividing signed numbers
The order of operations
Properties of algebra
Solving equations using the addition, multiplication, and division properties
Algebraic word problems

4. (25%) - Measurement and statistics
The U.S. system of measurement
Conversions between metric and U.S. systems of measurement
Percents
Mean and median

Laboratory or Activity Content

Group in-class assignments related to the daily lesson.

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Problem solving exercises
Skills demonstrations

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Classroom Discussion
Group projects
Individual projects
Objective exams
Projects
Problem-solving exams
Participation
Skills demonstrations
Skill tests

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Collaborative group work
Clinical demonstrations
Class activities
Class discussions
Instructor-guided use of technology
Lecture
Small group activities

Describe specific examples of the methods the instructor will use:
Professor will lecture new content using flashcards and multiple color markers to express steps of solving equations.

Representative Course Assignments

Writing Assignments
- Create pre-tests in advance of an exam by using topics from their study guide.
- Write step-by-step math procedures on flashcards using mnemonics.
- Complete homework problems selected from the textbook such as writing out the process related to word problems involving mean and median.

Critical Thinking Assignments
- Use mnemonic skills to recall algebraic sequences.
- Utilize study guides to prepare for upcoming exams.
- Distinguish between different methods of solving math word problems.

Reading Assignments
- Read sections in the book on such topics as how to set up a simple interest problem.
- Read the sections in the book that apply to the next meeting's topic.

Skills Demonstrations
- Demonstrate how to prepare and study for exams by creating note cards.
- Demonstrate the ability to create a pretest using the study guide provided.

Outside Assignments

Representative Outside Assignments
- Assigned homework problems selected from the textbook.
- Access and create student-generated flashcards on topics such as addition, subtraction, multiplication, and division problems using signed numbers.
- Assigned reading material from the textbook such as how to set up a problem involving simple interest.

Articulation

Comparable Courses within the VCCCD
LS R016B - Fundamentals of Mathematics II

Textbooks and Lab Manuals

Resource Type
Textbook

Classic Textbook
Yes

Description
Staszkow, Ronald. *Math Skills: Arithmetic with Introductory Algebra and Geometry.* 7th ed. Kendall Hunt, 2008.

Resource Type
Textbook

Classic Textbook
No

Description
Tussy, Alan, and Diane Koenig. *Basic Mathematics with Early Integers*. 6th ed. Cengage, 2018.

Resource Type
Textbook

Description
Tobey, John, et al. *Basic College Mathematics*. 8th ed. Pearson, 2017.

Library Resources

Assignments requiring library resources
None

Sufficient Library Resources exist
Yes

Primary Minimum Qualification
SPECIAL EDUCATION

Review and Approval Dates

Department Chair
10/28/2019

Dean
10/28/2019

Technical Review
11/07/2019

Curriculum Committee
11/19/2019

DTRW-I
MM/DD/YYYY

Curriculum Committee
MM/DD/YYYY

Board
MM/DD/YYYY

CCCCO
12/04/2019

Control Number
CCC000434262

DOE/accreditation approval date
MM/DD/YYYY