LS R016B: FUNDAMENTALS OF MATHEMATICS II

Originator
ptrujillo

College
Oxnard College

Discipline (CB01A)
LS - Learning Skills

Course Number (CB01B)
R016B

Course Title (CB02)
Fundamentals of Mathematics II

Banner/Short Title
Fundamentals of Mathematics II

Credit Type
Credit

Start Term
Fall 2022

Catalog Course Description
This course is designed for students who have difficulty understanding and applying mathematical concepts. The course will cover ratio, proportion, percent, introduction to algebra, basic introduction to measurement and statistics and introduction to geometry. The class will also include test-taking, mnemonic, and memory strategies for learning and recalling basic mathematical operations.

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)
N - The Course is Not 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
(L) Letter Graded

Alternate grading methods
(O) Student Option- Letter/Pass
(P) 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
70
Maximum Contact/In-Class Lecture Hours
70

Activity

Laboratory

Total in-Class

Total in-Class
Total Minimum Contact/In-Class Hours
70
Total Maximum Contact/In-Class Hours
70

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Unpaid

Total Outside-of-Class

Total Outside-of-Class
Minimum Outside-of-Class Hours
140
Maximum Outside-of-Class Hours
140

Total Student Learning

Total Student Learning
Total Minimum Student Learning Hours
210
Total Maximum Student Learning Hours
210

Minimum Units (CB07)
4
Maximum Units (CB06)
4

Advisories on Recommended Preparation
LS R016A and concurrent enrollment in ACT R016

Requisite Justification

Requisite Type
Advisory

Requisite
LS R016A

Requisite Description
Course in a sequence

Level of Scrutiny/Justification
Content review

Requisite Type
Advisory

Requisite
ACT R016

Requisite Description
Course not in a sequence

Level of Scrutiny/Justification
Content review

Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	Demonstrate the use of mathematics skills to solve problems involving ratios and proportions, percents, introduction to geometry, introduction measurement and statistics, introduction to graphs, and introductory algebra
2	Demonstrate the correct use of strategies for solving word problems

Course Objectives

	Upon satisfactory completion of the course, students will be able to:
1	Applications involving percents
2	Applications involving simple interest
3	Reading Measuring Devices
4	Reading statistical graphs
5	Finding Mean and Median
6	Write ratios, identify, and solve proportion problems.
7	Complete basic one and two step algebraic problems.
8	Use formulas to solve geometric and algebraic problems.
9	Students will be able to solve two step word problems involving basic fraction's and decimals.
10	Order of Operations with Signed Numbers
11	Identify basic geometry objects
12	Understand basic Angles

Course Content

Lecture/Course Content

1. Fraction
   a. Solve problems with fractions addition, subtraction, multiplication, and division
2. Ratio, Proportion, and Percent
   a. Ratios
   b. Proportions
   c. Applications involving proportion
   d. Percents converting decimals and fractions to percents
   e. Percent of a number
   f. Applications involving percents
   g. Applications involving simple interest
3. Introductory Algebra
   a. variables and formulas
   b. signed numbers
   c. adding signed numbers
   d. subtracting signed numbers
   e. multiplying and dividing signed numbers
   f. order of operations with signed numbers
   g. solving basic equations
   h. words to algebra
4. Introduction to Formulas
5. Introduction to Geometry
   a. Basic geometric objects
   b. Triangles
   c. Quadrilaterals
   d. Circles
   e. Plane figures: perimeters and areas
6. Measurement and Statistics
   a. Reading measuring devices
   b. US customary System of Measurement
   c. Us and Metric Temperatures

d. Conversions with Mixed Units
e. Statistical Graphs
f. Applications involving statistics and measurements

Laboratory or Activity Content
NONE

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

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):
Computational homework
Group projects
Mathematical proofs
Objective exams
Problem-solving exams
Quizzes
Skills demonstrations
Skills tests or practical examinations
Problem-Solving Assignments

Instructional Methodology

Specify the methods of instruction that may be employed in this course
Audio-visual presentations
Class activities
Class discussions
Collaborative group work
Computer-aided presentations
Distance Education
Group discussions
Instructor-guided interpretation and analysis
Lecture
Small group activities

Describe specific examples of the methods the instructor will use:
A. Professor will lecture using flashcard notes and multi-colored pens
B. Students will work in groups at the white board solving multi-step equations

Representative Course Assignments

Writing Assignments
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Critical Thinking Assignments
A. Students will answer multi-step math equations and word problems

Reading Assignments
1. Students will read text to complete assignments.

Skills Demonstrations
A. Students will solve problems at the white board during class.

Other assignments (if applicable)
1. Students will complete specific lessons from the text to be completed at home such as exercises from any specific chapter assignment.
2. Students will complete teacher-generated worksheets for practice and feedback.

Outside Assignments

Representative Outside Assignments

1. Students will complete specific lessons from the text to be completed at home such as exercises from any specific chapter assignment.
2. Students will complete teacher-generated worksheets for practice and feedback.

Articulation

Comparable Courses within the VCCCD

LS M07B - Basic Math Skills II

Textbooks and Lab Manuals

Resource Type

Textbook

Description

Staszkow, Ronald (2008). *Math Skills* (7th). Hunt Publishing Company.

Resource Type

Textbook

Description

Tussy, Alan. Basic Mathematics with Early Integers. Boston. Cengage. 2018

Distance Education Addendum

Definitions

Distance Education Modalities

Hybrid (1%–50% online)
Hybrid (51%–99% online)
100% online

Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.

Yes

Regular Effective/Substantive Contact

Hybrid (1%–50% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Discussion board online for students to respond to questions/prompts and to reply to classmates
Synchronous Dialog (e.g., online chat)	Online classes held on LMS, and also recorded for future use

Other DE (e.g., recorded lectures)	Lectures recorded and included in the LMS for introduction of new material Recorded lectures for tips and strategies to assist in completing various assignments
E-mail	Sending out of reminders and communication Students may contact instructor for help or with questions
Telephone	Instructor may call students to assist and to keep in contact with students

Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Discussion board online for students to respond to questions/prompts and to reply to classmates
Synchronous Dialog (e.g., online chat)	Online classes held on LMS, and also recorded for future use
Other DE (e.g., recorded lectures)	Lectures recorded and included in the LMS for introduction of new material Recorded lectures for tips and strategies to assist in completing various assignments
E-mail	Sending out of reminders and communication Students may contact instructor for help or with questions
Telephone	Instructor may call students to assist and to keep in contact with students
Video Conferencing	Instructor may use video conferencing to go over work, to provide assistance, and to hold small study groups Students may use this means to meet with one another to work on group assignments

100% online Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Discussion board online for students to respond to questions/prompts and to reply to classmates
Synchronous Dialog (e.g., online chat)	Online classes held on LMS, and also recorded for future use
Other DE (e.g., recorded lectures)	Lectures recorded and included in the LMS for introduction of new material Recorded lectures for tips and strategies to assist in completing various assignments
E-mail	Sending out of reminders and communication Students may contact instructor for help or with questions
Telephone	Instructor may call students to assist and to keep in contact with students
Video Conferencing	Instructor may use video conferencing to go over work, to provide assistance, and to hold small study groups Students may use this means to meet with one another to work on group assignments

Examinations

Hybrid (1%–50% online) Modality

On campus
Online

Hybrid (51%–99% online) Modality

On campus
Online

Primary Minimum Qualification

LEARNING DISABILITIES, DSPS

Review and Approval Dates

Department Chair
12/02/2020

Dean
12/02/2020

Technical Review
12/09/2020

Curriculum Committee
12/09/2020

DTRW-I
MM/DD/YYYY

Curriculum Committee
MM/DD/YYYY

Board
MM/DD/YYYY

CCCCO
01/12/2021

Control Number
CCC000584490

DOE/accreditation approval date
MM/DD/YYYY