MATH R050S: ALGEBRA SUPPORT FOR MATH R100

Originator
lruvalcaba

Co-Contributor(s)

Name(s)
LRuvalcaba

College
Oxnard College

Discipline (CB01A)
MATH - Mathematics

Course Number (CB01B)
R050S

Course Title (CB02)
Algebra Support for MATH R100

Banner/Short Title
Alg Support for R100

Credit Type
Credit

Honors
No

Start Term
Fall 2023

Catalog Course Description
This corequisite support course is to be taken concurrently with MATH R100, Mathematics for Career Education. Emphasis is placed on foundational skills which are necessary for a student to successfully complete MATH R100. This course offers support for college mathemtics topics along with study skills development.

Taxonomy of Programs (TOP) Code (CB03)
1701.00 - Mathematics, General

Course Credit Status (CB04)
S (Support Course - 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)
N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)
A - One level below transfer

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)
S - Course is a support course

Field trips
Will not be required

Grading method
(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
17.5
Maximum Contact/In-Class Lecture Hours
17.5

Activity

Laboratory

Total in-Class

Total in-Class
Total Minimum Contact/In-Class Hours
17.5

Total Maximum Contact/In-Class Hours
17.5

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Unpaid

Total Outside-of-Class

Total Outside-of-Class
Minimum Outside-of-Class Hours
35
Maximum Outside-of-Class Hours
35

Total Student Learning

Total Student Learning
Total Minimum Student Learning Hours
52.5
Total Maximum Student Learning Hours
52.5

Minimum Units (CB07)
1
Maximum Units (CB06)
1

Corequisites
MATH R100

Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	Solve 2-step linear equations.
2	Interpret quantitative and qualitative data displayed in tables and graphs.

Course Objectives

	Upon satisfactory completion of the course, students will be able to:
1	Evaluate expressions and perform operations over the set of real numbers.
2	Interpret data displayed in tables and graphs.
3	Calculate measures of central tendency and variation for a given data set.
4	Evaluate basic geometric formulas.
5	Solve linear equations.
6	Simplify expressions and solve equations involving radicals.
7	Apply effective learning skills for success in college.

Course Content

Lecture/Course Content
Choose at least three review topics below which support the chosen topics covered in Math R100.

1. Performing operations and evaluating expressions
    a. Operations with fractions and proportions
    b. Adding, subtracting, multiplying, and dividing real numbers
    c. Exponents, square roots, order of operations, and scientific notation
    d. Ratios
    e. Percents
    f. Convert percentages to and from decimals
    g. Evaluate expressions with one or more variables
2. Summarizing data graphically and in tables
    a. Frequency distributions
    b. Histograms
    c. Dot plots
    d. Box plots
    e. Bar graphs
    f. Pie Charts
3. Measures of center and spread
    a. Mean
    b. Median
    c. Mode
    d. Range
    e. Variance
    f. Standard Deviation
4. Geometric formulas
    a. Perimeter
    b. Circumference
    c. Area
    d. volume
5. Linear equations
    a. Slope and rates of change
    b. Determine the equation of a line using slope-intercept form
    c. Graph a line using slope-intercept form
    d. Solve linear equations
6. Radicals
    a. Simplify and evaluate radical expressions
    b. Solve equations involving radicals
7. Learning skills
    a. Apply learning skills that promote success in college

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):

Written expression
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):

Computational homework
Group projects
Individual projects
Journals
Mathematical proofs
Objective exams
Oral presentations
Portfolios
Problem-solving exams
Quizzes
Reports/papers

Research papers
Skills demonstrations
Skills tests or practical examinations

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
Demonstrations
Distance Education
Group discussions
Guest speakers
Instructor-guided interpretation and analysis
Instructor-guided use of technology
Internet research
Lecture
Small group activities

Describe specific examples of the methods the instructor will use:

Instructors will provide just in time remediation such solving linear equations for Math R100 and will facilitate group projects and activities to help students demonstrate mastery.

Representative Course Assignments

Writing Assignments

Summarizing and interpreting answers to problems in paragraph form; articulating responses within the computational homework to demonstrate an understanding of concepts.

Critical Thinking Assignments

1. Solve equations
2. Graph linear functions
3. Interpret data displayed in tables and graphs.

Reading Assignments

1. Textbook readings of definitions, rules, properties, and processes for completing various types of application problems.

Outside Assignments

Representative Outside Assignments

Representative outside assignments may include, but are not limited to, homework problems, projects, activities, and group work in which students:

- Perform operations and evaluating expressions with fractions and proportions, absolute value, real numbers, exponents, square roots, scientific notation, ratios, and percents.
- Convert percentages to and from decimals.
- Evaluate expressions with one or more variables.
- Summarize data graphically and in tables, using frequency distribution, histograms, dot plots, box plots, bar graphs, pie charts.
- Apply measures of center and spread, including the mean, median, mode, range, variance, and standard deviation to understand a data set(s).
- Simplify and evaluate radical expressions and solve equations involving radicals.
- Apply the theory of linear equations, computing the slope and rates of change, determining the equation of a line using slope-intercept form, graphing a line using slope-intercept form and solving linear equations.
- Apply learning skills that promote success in college.

Textbooks and Lab Manuals

Resource Type

Textbook

Description
Tannenbaum, P. (2022). *Excursions in Modern Mathematics* (10th). Pearson ISBN-13: 9780137423354

Resource Type
Textbook

Classic Textbook
Yes

Description
Pirnot, T. (2022). Mathematics all Around (7th). Pearson. ISBN-13: 9780137383962

Library Resources

Sufficient Library Resources exist
Yes

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)	Regular use of asynchronous discussion boards encourages various types of interaction and critical thinking skills among all course participants. Questions and topics posed will allow students to discuss, compare and contrast, identify, and analyze elements of the course outcomes. Other discussion boards may be used for Q&A and general class discussion by students and instructor to facilitate student success and strengthen student learning outcomes.

E-mail	E-mail, class announcements and various learning management system tools such as "Message Students Who" and "Assignment comments" will be used to regularly communicate with all students on matters such as clarification of class content, reminders of upcoming assignments and/or course responsibilities, to provide prompt feedback to students on coursework to facilitate student learning outcomes, or to increase the role of an individual educator in the academic lives of a student. Students will be given multiple ways to email instructor through both the learning management system inbox and faculty provided email accounts.
Video Conferencing	Video tools such as ConferZoom may be used to provide live synchronous or asynchronous sessions with students. ADA compliance will be upheld with Closed Captioning during the session or of the recorded session. Student-to-student group meetings will also be encouraged.
Other DE (e.g., recorded lectures)	Students will watch recorded video lectures.

Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Regular use of asynchronous discussion boards encourages various types of interaction and critical thinking skills among all course participants. Questions and topics posed will allow students to discuss, compare and contrast, identify, and analyze elements of the course outcomes. Other discussion boards may be used for Q&A and general class discussion by students and instructor to facilitate student success and strengthen student learning outcomes.
E-mail	E-mail, class announcements and various learning management system tools such as "Message Students Who" and "Assignment comments" will be used to regularly communicate with all students on matters such as clarification of class content, reminders of upcoming assignments and/or course responsibilities, to provide prompt feedback to students on coursework to facilitate student learning outcomes, or to increase the role of an individual educator in the academic lives of a student. Students will be given multiple ways to email instructor through both the learning management system inbox and faculty provided email accounts.
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E-mail	Students will watch recorded video lectures.

100% online Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Regular use of asynchronous discussion boards encourages various types of interaction and critical thinking skills among all course participants. Questions and topics posed will allow students to discuss, compare and contrast, identify, and analyze elements of the course outcomes. Other discussion boards may be used for Q&A and general class discussion by students and instructor to facilitate student success and strengthen student learning outcomes.
E-mail	E-mail, class announcements and various learning management system tools such as "Message Students Who" and "Assignment comments" will be used to regularly communicate with all students on matters such as clarification of class content, reminders of upcoming assignments and/or course responsibilities, to provide prompt feedback to students on coursework to facilitate student learning outcomes, or to increase the role of an individual educator in the academic lives of a student. Students will be given multiple ways to email instructor through both the learning management system inbox and faculty provided email accounts.

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Examinations

Hybrid (1%–50% online) Modality

On campus
Online

Hybrid (51%–99% online) Modality

On campus
Online

Primary Minimum Qualification

MATHEMATICS

Review and Approval Dates

Department Chair

10/05/2022

Dean

10/05/2022

Technical Review

10/12/2022

Curriculum Committee

10/12/2022

DTRW-I

11/10/2022

Curriculum Committee

11/23/2022

Board

12/13/2022

Control Number

CCC000599726

DOE/accreditation approval date

MM/DD/YYYY