MATH R055S: ALGEBRA SUPPORT FOR MATH R105

Originator
ccano

Co-Contributor(s)

Name(s)
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College
Oxnard College

Discipline (CB01A)
MATH - Mathematics

Course Number (CB01B)
R055S

Course Title (CB02)
Algebra Support for MATH R105

Banner/Short Title
Algebra Support for MATH R105

Credit Type
Credit

Start Term
Spring 2022

Catalog Course Description
This corequisite support course is to be taken concurrently with MATH R105, Introductory Statistics. Emphasis is placed on foundational skills which are necessary for a student to successfully complete MATH R105. This course offers support for Introductory Statistics 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
35
Maximum Contact/In-Class Lecture Hours
35

Activity

Laboratory

Total in-Class

Total in-Class
Total Minimum Contact/In-Class Hours
35
Total Maximum Contact/In-Class Hours
35

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Unpaid

Total Outside-of-Class

Total Outside-of-Class
Minimum Outside-of-Class Hours
70
Maximum Outside-of-Class Hours
70

Total Student Learning

Total Student Learning
Total Minimum Student Learning Hours
105
Total Maximum Student Learning Hours
105

Minimum Units (CB07)
2
Maximum Units (CB06)
2

Corequisites
MATH R105

Requisite Justification

Requisite Type
Corequisite

Requisite
Math R105

Requisite Description
Other (specify)

Specify Other Requisite Description
Support Course

Level of Scrutiny/Justification
Content review

Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	Recognize, generate, and fluently use equivalent forms of fractions, decimals, and percentages.
2	Solve linear equations, and interpret the meaning between the values and variables in a linear equation.

Course Objectives

	Upon satisfactory completion of the course, students will be able to:
1	Identify the place-value structure of the base-ten number system and represent and compare rational numbers in decimal form and their approximate location on a number line.

2	Recognize, generate, and fluently use equivalent forms of fractions, decimals, and percentages.
3	Explain and apply the concept of variables as representations of quantities.
4	Explain and apply the concept of a function and interpret functions as communicating relationships between variables.
5	Solve linear equations.
6	Identify, compare, and explain the contextual meaning of fractions in various statistical settings.
7	Use the order of operations to evaluate statistical formulas by hand and with technology.
8	Access technology to perform calculations.

Course Content

Lecture/Course Content

A just-in-time approach to:
I.Topics from PreAlgebra and Beginning Algebra
A. Order of operations
B. Arithmetic operations on signed numbers
C. Representation of fractions, decimals, and signed numbers on a number line
D. Conversion and comparison or fractions, decimals, and percentages
E. Graphing in the Cartesian coordinate system
F. Solving algebraic equations for a given variable.
G. A graph as the set of solutions to an equation
H. Scientific Notation
I. Rounding
J. Area of a rectangle
II. Topics from Intermediate Algebra
A. Evaluation of numerical and algebraic expressions (e.g. square roots, exponents, complex fractions)
B. Operations with summations
C. Double inequalities and interval notation
D. Understanding application problems
E. Linear functions, linear functions, constant rate of change, graphing, interpreting slope and y-intercept in context
III. Graphs of distributions of categorical data: bar charts and pie charts
IV. Graphs of univariate distributions of quantitative data: histograms and boxplots
V. Topics related to developing effective learning skills:
A. Study skills: organization and time management, test preparation and test-taking skills
B. Self-assessment: using performance criteria to judge and improve one's own work, analyzing and correcting errors on one's test
C. Strategies for and using resources (e.g. peer study groups, computer, lab, tutoring, counseling)

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
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):

Group projects
Individual projects
Problem-solving exams
Quizzes
Problem-Solving Assignments

Instructional Methodology

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

Class activities
Class discussions
Distance Education
Lecture

Describe specific examples of the methods the instructor will use:

Instructors will lecture on remedial material necessary for Math R105, and will supervise group activities to demonstrate mastery.

Representative Course Assignments

Writing Assignments

A. Students write (with a rubric) to express statistical concepts for tests, homework, class projects, and other work.

Critical Thinking Assignments

Students will be able to express probability in fractions, decimals, or percents, and will be able to convert between the three representations.

Reading Assignments

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

Problem-Solving and Other Assignments (if applicable)

A. Mathematical problem solving

Outside Assignments

Representative Outside Assignments

Students will complete homework assignments which ensure understanding of remedial topics important for statistics.

Articulation

Comparable Courses within the VCCCD

MATH V44J - Just-in-Time Support for Elementary Statistics

Textbooks and Lab Manuals

Resource Type

Textbook

Description

Sullivan, Michael *(2021). Statistics: Informed Decisions Using Data* (6th). New York, Pearson.

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)	Students will post questions on algebra topic relevant to statistics and respond to other posts with the intent of creating dialogue.
Other DE (e.g., recorded lectures)	Students will watch recorded, video lectures.
E-mail	Responses to specific email questions
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.

Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post questions on algebra topic relevant to statistics and respond to other posts with the intent of creating dialogue.
Other DE (e.g., recorded lectures)	Students will watch recorded, video lectures.
E-mail	Responses to specific email questions
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.

100% online Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post questions on algebra topic relevant to statistics and respond to other posts with the intent of creating dialogue.
Other DE (e.g., recorded lectures)	Students will watch recorded, video lectures.
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.
E-mail	Responses to specific email questions

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
12/06/2021

Dean
12/07/2021

Technical Review
02/09/2022

Curriculum Committee
02/09/2022

Control Number
CCC000599725

DOE/accreditation approval date
MM/DD/YYYY