All Fields Report

Basic Course Information	
College	Cañada College
Discipline	MATH-Mathematics
Course Number	110
Full Course Title	Elementary Algebra
Catalog Course Description	This is the first course in a 2-part series covering elementary and intermediate algebra. Topics include the real number system, linear equations, linear inequalities, graphing, systems of equations, integer exponents, polynomials, factoring, proportions, rational expressions, and problem solving. Students who complete this course with a C or better are advised to enroll in MATH 120.
Proposal Information	
Proposed Start	Year: 2023 Semester: Fall
Proposed Curriculum Committee Meeting Date:	11/18/2022
Deadline for submission to Dean's Queue:	10/13/2022
Deadline for submission of curriculum proposal to the Technical Review Committee:	10/25/2022
Proposal Origination Date:	10/14/2022
Justification For Board Report OR Curriculum Inventory update:	1. For NEW Courses: Provide a brief justification statement describing the need for the course, its place in the curriculum, and pertinent information such as the role of advisory committees. New courses require approval of the SMCCCD Board of Trustees. The justification statement will be included on the annual Curricular Board report. Use complete sentences and present tense. 2. For all types of Course MODIFICATIONS (modifications, banking, deletions and reactivations): Provide a brief justification statement describing the need for the change. The justification statement will be used for course updates in the State Curriculum Inventory as necessary. Use complete sentences and present tense. Banking pre-transfer Math courses pursuant to AB 705
Honors Course	No
Open Entry/Open Exit	No 0

Equivalent Courses	
Will this course replace an existing course in the catalog, or an experimental course?	No
If yes, identify and explain.	
Similar Courses	
Is there a similar or equivalent course in	No

SMCCCD?	
Added Similar Courses	

Units/Hours

Unit Types	Fixed
Units	Min: 5.00
Variable Range	Range (or)

Hours

Please enter hours as per term values

Method	Min Hours	Max Hours	Min Faculty Load	Min Units
Lecture	80.00	90.00	5.00	5.00
Lab	0.00	0.00	0.00	0.00
TBA	0.00	0.00	0.00	0.00
Work Experience	0.00	0.00	0.00	0.00
Field Experience	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00
Homework	160.00	180.00	0.00	0.00
Total Student Learning	240.00	270.00	5.00	5.00

Other Hours	

Course Details

Repeatable for Credit	No
Grading Methods	Letter Grade Only
Audit	Yes

Materials Fee

Fee Required?	No

Student Learning Outcomes

Upon successful completion of this course, a student will meet the following outcomes:

1. Solve linear algebraic equations and inequalities that model a given application.
2. Simplify polynomials, and rational expressions.
3. Construct and analyze a linear graph in a Cartesian coordinate system.
4. Construct and solve quadratic and rational equations to model a given application.
5. Solve a two by two system of linear equations.

Course Objectives

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

1. Use a number line to order real numbers.
2. Find the absolute value of real numbers.
3. Manipulate and perform basic operations on real numbers, including fractions and decimals.
4. Define and use exponents and the order of operations.
5. Evaluate algebraic expressions, given replacement values for variables.

6. Identify and use the properties of real numbers.
7. Simplify algebraic expressions.
8. Solve linear equations.
9. Translate word phrases and sentences into algebraic expressions and equations.
10. Solve word problems involving linear equations.
11. Solve linear inequalities.
12. Graph solutions sets and use interval notation.
13. Read and interpret bar and line graphs.
14. Graph linear equations.
15. Identify intercepts of a linear equation.
16. Solve systems of linear equations.
17. Solve word problems involving systems of linear equations.
18. Manipulate and evaluate exponential expressions.
19. Define and identify polynomials.
20. Manipulate and perform basic operations on polynomials.
21. Factor polynomials.
22. Solve equations containing polynomials
23. Solve word problems involving rational equations.
24. Define and identify rational expressions.
25. Manipulate and perform basic operations on rational expressions.
26. Solve equations containing rational expressions.
27. Solve word problems involving rational equations.

Course Lecture Content

1. Real numbers and their properties
    1. Fractions
    2. Symbols and sets of numbers
    3. Operations of real numbers
    4. Properties of real numbers
    5. Absolute value
    6. Ratio and percents
    7. Order of Operations
2. Linear equations
    1. Variables and Constants
    2. Scatterplots
    3. Simplifying expressions
    4. Solving equations
    5. Applications of equations
    6. Formulas
3. Graphs
    1. Reading graphs
    2. The rectangular coordinate system
    3. Using the slope and y-intercept to graph a line
    4. Graphing linear equations
    5. Rates of change
4. Systems of linear equations

1. Solve systems by graphing
    2. Solve systems by substitution method
    3. Solve systems using elimination by addition
    4. Applications to systems
5. Functions
    1. An introduction to function notation
    2. Graphing lines in function notation
    3. Using linear functions to make predictions
    4. Interpreting the slope and y-intercept
6. Polynomials
    1. Exponents
    2. Adding and subtracting polynomials
    3. Multiplying polynomials
    4. Powers of polynomials
    5. Binomial Conjugates
    6. Dividing polynomials
7. Factoring polynomials
    1. Greatest common factor
    2. Factoring by grouping
    3. Factoring trinomials
    4. Factoring binomials
    5. Quadratic equations

Course Lab Content

TBA Hours Content

Frequently Recommended Preparation

Frequently Recommended	

Justification for Frequently Recommended Preparation

Why is the knowledge of the recommended course(s), skill(s) or information necessary for students to succeed in the "target" course? Specify the relationship between the recommended knowledge and skills required of students and those taught in the "target course? (Please list the specific proficiencies students must possess in order to succeed in the "target" course.)

.

Other Recommended Preparation

You have no defined requisites.

Prerequisites/Corequisites

Drag and Drop to Reorder

Edit/Delete	Requisites	Analysis
	Prerequisite MATH 811 or	
	Prerequisite	

	appropriate score on the College Placement Test or other multiple measures assessment.	

Content Review

MATH 811 - Prerequisite
(Objective to Objective)
Historical

Mode of Delivery

Modes of Delivery

Online
Hybrid
Lecture

Representative Instructional Methods

Methods	Lecture Activity Discussion
Other Methods	

Representative Assignments

Writing Assignments
(List all assignments, including library assignments. Outside assignments are not required for lab-only courses, although they can be given.)

- Several times per semester, students will write a paragraph explaining their reasoning for a given problem.

Reading Assignments
(List all assignments, including library assignments. Outside assignments are not required for lab-only courses, although they can be given.)

- One to three sections, or equivalently, about 10 to 15 pages of the textbook per week.

Other Outside Assignments
(List all assignments, including library assignments. Outside assignments are not required for lab-only courses, although they can be given.)

- None.

To be Arranged Assignments
(List all assignments, including library assignments. Outside assignments are not required for lab-only courses, although they can be given.)

- Not applicable.

Representative Methods of Evaluation

This section defines the ways students will demonstrate that they have met the student learning outcomes.

Student grades will be based on multiple measures of student performance. Instructors will develop appropriate classroom assessment methods and procedures for calculating student grades, including the final semester grade. The following list displays typical assessment methods appropriate for this course. The actual assessment methods used in a particular classroom and section will be listed in the instructor?s syllabus.

Methods must effectively evaluate critical thinking. Credit courses must include written communication, problem solving, and/or skills demonstrations.

Multiple measures may include, but are not limited to, the following:

Methods	• Class Work • Exams/Tests • Homework • Quizzes • Other special assignments such as journals, projects, and worksheets.

Representative Texts

Textbooks such as the following are appropriate:

Formatting Style	APA

Textbooks

	1. Lial, Margaret L.. *Beginning and Intermediate Algebra*, 7 ed. Pearson, 2020
	2. Lehmann, Jay. *Elementary Algebra: Functions and Authentic Applications*, 3 ed. USA: Pearson, 2019

Manuals

You have no manuals defined.

Periodicals

You have no periodicals defined.

Software

	1. MyMathLab. Pearson, latest update ed. On-line homework application

Other

You have no other defined.

Degree/Certificate Applicability

Designation	Non-Degree Credit Basic Skills
Proposed For	

Course Designation Text	Are there degrees/certificates to which this course applies? None

General Education/Degree/Transfer Course	
Page Last Saved on Friday, Oct 14, 2022 at 1:49 PM By Jose Pena	
CSU Transfer Course	
	Does not transfer to CSU Approved

Course Distance Education	
Distance Ed Supplement	Revision to existing distance education supplement
Distance Education	Distance education component was developed by an instructor with training in online pedagogy. Training: This course was designed by and will be taught by instructors who have received QOTL or equivalent training
Method of Distance Education	Online, Hybrid, Web Assisted Course; (If there are limitations on how this course would be offered please explain below)
Online Method Limitations	
Other Methods	
Course Content and Methodology	The objectives and content of the course are adequately covered by the methods of instruction, assignments, evaluation of student outcomes, and instructional materials. If this course is currently taught in a lecture mode, the department faculty have determined that the same objectives can be achieved in a distance learning mode. The instructional equipment and materials are sufficient. The preparation and training of faculty are sufficient. Regular personal contact between students and instructor is sufficient. Methods of student evaluation are designed to maintain examination security. Evaluation of student outcomes is sufficient to permit review and assessment of the effectiveness of distance education for this course and to provide information for the annual distance education report.
Instructional Methodologies (How will you deliver the course content?):	Announcements/Bulletin Boards E-mail Electronic Forum Online Presentations Resource Links Telephone
Representative Courseware/Textbooks Materials:	No additional textbooks required
Methods of Evaluation of Student Performance:	Online weekly homework assignments Online quizzes every two weeks Online chapter tests (about one per month) Online cumulative final exam
How are you ensuring that students with disabilities can access your course in accordance with Section 508?	All images will have text descriptions All videos will have captioning All audio will have transcriptions. Standardized formatting is used to support screen readers Course is evaluated using the OEI Rubric Faculty will work with DRC to ensure that proper accommodations are provided for students

Plan for Regular Effective Communication Contact Between Faculty and Student (Title 5, 55204). "Local policies should establish and monitor minimum standards of regular effective contact."
Announcements/Bulletin Boards - Instructor will make weekly course announcements
Discussion Boards - There will be discussion boards for each chapter. Instructor will reply to a post within 48 hours.
Email Communication - The instructor will reply to student emails within 48 hours.
Office hours - Office hours will be held weekly through video conference.

Resources Needed	
Adequate Library Resources	Consultation with the Coordinator of Library Services regarding the adequacy of campus and online information resources to fulfill course objectives is required prior to course approval. Inadequate to support the course Please Specify:
Affected Resources	Which of the following resources do you expect to be affected by the offering of this class? Check as many as appropriate. None of the above
Explain what effect the areas you have checked will have upon this college:	
Course currently exists. No additional services needed.	

Comparable Transfer Course Information	
Are there comparable courses?	Yes
Edit/Del	**College Info**

Minimum Qualification
No Minimum Qualifications For this Course

CB Codes	
CB03 TOP Code	1701.00 - Mathematics, General
CB04 Course Credit Status	C - Credit - Not Degree Applicable
CB05 Course Transfer Status	C = Not Transferable
CB08 Course Basic Skill Status (PBS Status)	1B = Course is a basic skills course.
CB09 SAM Code	E - Non-Occupational
CB11 California Classification Codes	Y - Credit Course
CB21 Levels	B = 2 Levels Below

Below Transfer	
CB23 Funding Agency Category	Y = Not Applicable
CB25 Course General Education Status	Y - Not Applicable
CB26 Course Support Course Status	N - Course is not a support course

Loading...
Loading...