

All Fields Report

Basic Course Information

College	Cañada College
Discipline	MATH-Mathematics
Course Number	811
Full Course Title	Pre-Algebra
Catalog Course Description	Covers the fundamental processes in arithmetic: reading mathematical notation, translating words into symbols, and properties of the real number system. Introduction to geometry and algebra.

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:	<p>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.</p> <p>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.</p> <p>Banking pre-transfer Math courses pursuant to AB 705</p>
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 SMCCCD?	Yes
Added Similar Courses	MATH 811 (College of San Mateo)

Units/Hours

Unit Types	Fixed			
Units	Min: 3.00			
Variable Range	Range (or)			
Hours				
Please enter hours as per term values				
Method	Min Hours	Max Hours	Min Faculty Load	Min Units
Lecture	32.00	36.00	2.00	2.00
Lab	48.00	54.00	1.65	1.00
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	64.00	72.00	0.00	0.00
Total Student Learning	144.00	162.00	3.65	3.00
Other Hours				
Course Details				
Repeatable for Credit	No			
Grading Methods	Grade Option (Letter Grade or Pass/No Pass)			
Audit	Yes			

Materials Fee

Fee Required?	No
----------------------	----

Student Learning Outcomes

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

1. Perform mathematical operations using signed numbers.
2. Set up and solve proportion problems.
3. Simplify numeric expressions involving fractions.
4. Simplify numeric expressions using mathematical operations using order of operations.
5. Translate verbal expressions into math and solve.

Course Objectives

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

1. Perform the four basic operations of arithmetic on whole numbers
2. Perform exponentiation on whole numbers
3. Calculate expressions using the rules for the order of operations
4. Perform the four basic operations of arithmetic with fractions
5. Perform the four basic operations of arithmetic with decimals
6. Convert numbers between decimal and fractional notation

7. Solve problems using ratio and proportion
8. Solve problems using percent
9. Name geometric shapes
10. Calculate the perimeter and area of geometric shapes
11. Perform the four basic operations with signed numbers
12. Solve equations in one variable

Course Lecture Content

1. Whole Numbers:
 1. Addition,
 2. Subtraction,
 3. Multiplication,
 4. Division,
 5. Exponents and Order of Operations,
 6. Problem Solving
2. Fractions:
 1. Reducing,
 2. Multiplication,
 3. Division,
 4. Least Common Multiple,
 5. Addition,
 6. Subtraction,
 7. Exponents and Order of Operations,
 8. Problem Solving
3. Decimals:
 1. Order and Rounding,
 2. Addition,
 3. Subtraction,
 4. Multiplication,
 5. Division,
 6. Estimating and Order of Operations,
 7. Fractions and Decimals
4. Ratio and Proportion:
 1. Ratios,
 2. Rates,
 3. Proportions,
 4. Problem Solving

Course Lab Content

1. Whole Numbers:
 1. Addition,
 2. Subtraction,
 3. Multiplication,
 4. Division,
 5. Exponents and Order of Operations,
 6. Problem Solving
2. Fractions:
 1. Reducing,

2. Multiplication,
3. Division,
4. Least Common Multiple,
5. Addition,
6. Subtraction,
7. Exponents and Order of Operations,
8. Problem Solving

3. Decimals:

1. Order and Rounding,
2. Addition,
3. Subtraction,
4. Multiplication,
5. Division,
6. Estimating and Order of Operations,
7. Fractions and Decimals

4. Ratio and Proportion:

1. Ratios,
2. Rates,
3. Proportions,
4. Problem Solving

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

You have no defined requisites.

Content Review

You have not defined content review.

Mode of Delivery

Modes of Delivery

Online
Hybrid

Lecture
Lab

Representative Instructional Methods

Methods	Lecture Lab Activity Discussion Individualized Instruction Observation and Demonstration
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.)

There will be at least 8 writing assignments per semester where students will be asked to reflect on various mathematical ideas and processes in their own words (approximately one to two paragraphs in length each).

For example: "In your own words, explain how to add two fractions with different denominators."

Reading Assignments

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

- Read approximately 2 chapter sections (approximately 10 pages) per week from the text

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	<ul style="list-style-type: none"> • Exams/Tests • Homework • Quizzes • Worksheets and Journals
----------------	---

Representative Texts

Textbooks such as the following are appropriate:

Formatting Style	APA
-------------------------	-----

Textbooks	
	1. Martin-Gay, Elayn. <i>Basic College Mathematics</i> , 6 ed. Pearson Publication, 2019
	2. Tobey, John Jr., Slater, Jeffrey, Blair, Jamie, Crawford, Jenny. <i>Basic College Mathematics</i> , 8 ed. Pearson Publication, 2017
	3. Akst, Geoffrey, and Bragg, Sadie. <i>Basic Mathematics Through Applications</i> , 5 ed. New York, NY: Pearson/Addison Wesley, 2013

Manuals	<i>You have no manuals defined.</i>
----------------	-------------------------------------

Periodicals	<i>You have no periodicals defined.</i>
--------------------	---

Software	<i>You have no software defined.</i>
-----------------	--------------------------------------

Other	<i>You have no other defined.</i>
--------------	-----------------------------------

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

CSU Transfer CourseDoes not transfer to CSU Approved**Course Distance Education**

Distance Ed Supplement	New distance education supplement
Distance Education	Distance education component was developed by an instructor with training in online pedagogy. Training: This course was designed in consultation with, and will be taught by faculty who have received STOTs, @One, Cañada's QOLT (Quality OnLine Training), Cañada's QOTL (Quality Online Teaching & Learning) or equivalent certifications.
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	None
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 Chat Rooms E-mail Electronic Forum One-Way Video Conferencing (One-way interactive video and two-way interactive audio) Online Presentations Resource Links Telephone Two-Way Video conferencing (Two-way interactive video and audio) Video one-way (ITV, Video cassette, radio, ect.)
Representative Courseware/Textbooks Materials:	
Methods of Evaluation of Student Performance:	Online homework, quizzes, writing assignments, class discussions
How are you ensuring that students with disabilities can access your course in accordance with Section 508?	1. Videos are captioned 2. Lecture screen-casts are captioned 3. Transcripts are provided for all multi-media files (audio and visual) 4. Alt-text is used for embedded images 5. Standardized formatting is used to support screen readers 6. All files are assessed with Accessibility Check options in Microsoft Office 7. Course is evaluated using the OEI Rubric (Online Education Initiative) 8. Faculty will work with DRC to ensure that proper accommodations are provided for students (e.g., extended time, Kurzweil, other UDI supports). 9. Documents and presentations are formatted to be ADA compliant; videos are

captioned. DRC contact information is included in the syllabus and on web access including a link to the DRC website.

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 course announcements as emails and retain them on the course bulletin board.

Discussion Boards - Discussion boards will be maintained for each chapter of content, allowing students to ask and answer course content questions. Instructor will review boards at least once every 24-48 hours and respond as appropriate.

Email Communication - Instructor will reply to student emails within 24-48 hours.

FAQ - FAQ of page will be maintained in Canvas

Resource Links - Instructor will provide links to additional online resources as appropriate and relevant to the course

Office hours - Instructor will offer weekly office hours through video conference or chat.

Study and/or Review Sessions - Instructor will provide a study guide for exams and follow up with a discussion or chat session.

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.
---------------------------	--

Explain what effect the areas you have checked will have upon this college:

Comparable Transfer Course Information

Are there comparable courses?	Yes
--------------------------------------	-----

Edit/Del	College Info
-----------------	---------------------

Minimum Qualification

No Minimum Qualifications For this Course

 Loading...

 Loading...

Web Catalog Metadata