

COURSE SYLLABUS*
Structure and Concepts of Elementary Mathematics II (Math 126)
Section 4843, Remote via Zoom, Tuesday, Thursday 6:30 -- 8:20 PM
Spring 2021, Cuyamaca College

INSTRUCTOR: Dr. Rudolph Perkins

E-MAIL: rudolph.perkins@gcccd.edu

Student Hours: Tuesday and Thursday from 6:00 to 6:30 pm remote via Zoom; see ConferZoom in Canvas for the link.

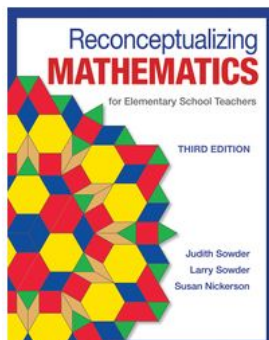
IMPORTANT DATES:

Regular Day & Evening Classes Begin	February 1
Last Day to Drop without "W" (semester length classes)	February 14
Last Day to Apply for Refund (semester length classes)	February 14
Holiday (Washington's Birthday Observed)	February 15*
Last Day to Apply for P/NP (semester length classes)	March 5
Last Day to Apply for Spring 2021 Degree/Certificate	March 12
Spring Recess	March 29 - April 3
Last Day to Drop Semester Length Classes	May 2
Holiday (Memorial Day)	May 31*
Final Examinations	June 1 - 7
Instructor Grade Deadline	June 10

Final Exam: TUESDAY, JUNE 1, 6:45 -- 8:45 p.m. Remote.

Required Materials:

TEXT: Reconceptualizing Mathematics: Sowder, Sowder, Nickerson 3rd edition



* All items in this syllabus are subject to change at the instructor's discretion. If any significant change occurs, you will be notified in writing by the instructor.

Course Prerequisite: Grades of C or above in the course Math 125 or equivalent.

Course Description:

In blending the mathematical topics of statistics, probability, measurement, coordinate geometry, plane geometry, solid geometry, logic, relations and functions, the course will investigate the interrelationships of these topics using a problem-solving approach and appropriate use of technology.

Student Learning Outcomes

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

1. Analyze the concept, structure, algorithms, and critical thinking involved in solving problems related to geometry, measurement, and probability.
2. Develop and reinforce conceptual understanding of mathematical topics through the use of patterns, problem solving, communication, connections, modeling, reasoning, and representation.

Class Purpose and Policies

As dictated by the SLOs above, the purpose of this course is to deepen your knowledge of elementary school level mathematics---particularly, geometry, probability and statistics. I intend for the course to be hands-on and student-centered, based around solving interesting and challenging problems and doing activities as a class. The purpose of these activities is to build on and expand your current mathematical knowledge.

Plan now on being in class every day that class meets and spending at least two hours each day outside of class studying and working problems. It is my intention to make this class as enjoyable as possible.

My goals for this course are for you to explore multiple methods and approaches to finding and explaining---to an elementary schooler or jr. higher---the correct solution to many types of problems. By the end of this course, you will be able to solve a variety of problems in geometry, counting, probability and statistics, but you will be expected to do much more, including: explaining your reasoning, often using illustrations, critiquing your peers' work, and understanding why a solution is wrong, and how to fix it. If you are having difficulty with the math concepts themselves, please see me as soon as possible.

Classroom Behavior: Class time is valuable. I expect you to be focused on the work of the class during class time. At all times a student's conduct and language is expected to be respectful of others. As students you are encouraged to participate in all class discussions. Part of the understanding process is being able to communicate your understanding of the content area. It will help you and your peers tremendously to ask any questions you may have. There are no "stupid" questions! Often, formulating a question and simply speaking it out loud can already lead you to coming up with the solution!

Hate-free Zone: In our Zoom/online classroom, each student should feel free to express their own opinion and ideas in a respectful manner. Students should be open to listen to and appreciate differences in opinions, life experience, worldviews, values/beliefs, etc. Our class is a **hate-free zone**. Please be mindful of how you communicate your values, beliefs, ideas, opinions, etc. While we will often disagree with other people, it does not give anyone the right to intentionally hurt others with words or to discriminate against them. Words matter.

* All items in this syllabus are subject to change at the instructor's discretion. If any significant change occurs, you will be notified in writing by the instructor.

This is especially important in a remote or virtual environment so take a moment to think about what you want to say or post in the chat/discussion board.

Attendance: is required at every class meeting. Excessive absences in a 3 unit class is 6 hours; therefore, I reserve the right to drop you from the course if you miss more than two class meetings. If you will be late or cannot make it to a class, please write to me in advance. This is one way of showing that you care and are serious about the course. Note that if you decide to drop the course, it is your responsibility to do so; do not rely on me to do this for you if you stop attending.

Exams: We will aim for three exams and one *comprehensive (cumulative)* final exam. **Make-up exams will not be given, but it may be possible to take an exam in advance if you know you will miss a scheduled exam.** So, if you know you will miss an exam, let me know in advance and arrangements may be made for you to take it early.

Grading Policy and Percentage of your total grade:

Final Exam: 20%

Exams (3 exams) 30%

Bi-Weekly Quizzes 20% (lowest quiz will be dropped)

Homework/Problem of the month/Class-work 30%

Passing Grade Policy: To earn a C or better in the class a student must earn an overall grade of C or better AND a D or better on the final assessment(s) where the instructor defines what constitutes the grades of C and D.

The following percentage ranges give a lower bound for your letter grade in the class:

98 - 100 % A+	88 - 89% B+	78 - 79% C +	60 - 69 % D
97 - 92% A	82 - 87% B	70 - 77% C	Below 60% F
91 - 90% A -	81 - 80% B-		

If you take the course CR/NCR or P/NP, then a credit grade (CR / P) is equivalent to an A, B, or C and a no credit grade (NCR / NP) is equivalent to a D or F.

Academic Integrity:

You may collaborate on homework discussion assignments, but everything you submit should be written up separately in your own words based on your understanding. Copying another student's work is not allowed. Collaboration of any kind on exams and / or quizzes is strictly prohibited. Any form of misconduct as described above will result in an "F" on the assignment and a possible referral to the Dean for further action.

Students with disabilities (DSPS)

If you have a documented disability and need accommodations for this class, please send me your DSPS Academic Accommodation form as early as possible. You must complete the [Student Registration for Test Proctoring](#) form on the [Test Proctor Website](#) or contact the Test Proctor directly at cuyamaca.dspstesting@gcccd.edu.

STEM Center Tutoring:

To support your efforts to succeed in this class, it is highly recommended that you utilize the free tutoring services available. The hours can be found at the [STEM Center Website](#). To make an appointment, please see the tutoring button on our Canvas course menu. You can

* All items in this syllabus are subject to change at the instructor's discretion. If any significant change occurs, you will be notified in writing by the instructor.

also call 619-800-2407 (during hours, leave a message and they will call you right back) or email cuyamacatutors@gmail.com with the course and time you would like to meet with a tutor.

Cuyamaca Cares:

[Cuyamaca Cares](#) is a program that offers many opportunities for help with food, housing, and personal counseling. The website has a lot of useful information. Since the food bank on campus is currently closed, there will be drive through opportunities which will be shared. If you have a specific need, please email Kaylin Rosal (cuyamaca.cares@gcccd.edu).

TIPS FOR SUCCESS:

- Get to class on time
- Keep a positive attitude; i.e. don't be too hard on yourself!
- Listen attentively to the lectures, take careful notes, and ask lots of questions
- Read the corresponding section in the book before and after class
- Do the homework, keeping in mind the point of view taken in class
- Make friends with your classmates, and study together outside of class
- Get a free tutor (see just below!)

The Standards for Mathematical Practice:

MP1 Make sense of problems and persevere in solving them.

MP2 Reason abstractly and quantitatively.

MP3 Construct viable arguments and critique the reasoning of others.

MP4 Model with mathematics.

MP5 Use appropriate tools strategically.

MP6 Attend to precision.

MP7 Look for and make use of structure.

MP8 Look for and express regularity in repeated reasoning.

126 Schedule Spring 2021*					
Week	Tuesday	Section / Topics	Thursday	Section / Topics	
1	Feb. 2	Intro / 16.1	Feb. 4	16.1--16.2	
2	Feb. 9	16.3, 17.1	Feb. 11	17.2	Quiz 1
3	Feb. 16	17.3	Feb. 18	17.4--17.5	
4	Feb. 23	17.6	Feb. 25	18.1	Quiz 2
5	Mar. 2	18.2	Mar. 4	18.3	Quiz 3
6	Mar. 9	Catch-up / Review	Mar. 11	Exam 1	
7	Mar. 16	19.1--19.2	Mar. 18	20.1	
8	Mar. 23	20.1--20.2	Mar. 25	20.2	Quiz 4
Sp. Break	Mar. 30	No class	Apr. 2	No class	
9	Apr. 6	20.3	Apr. 8	20.4	
10	Apr. 13	21.1	Apr. 15	21.2	Quiz 5
11	Apr. 20	21.3, Review	Apr. 22	Exam 2	
12	Apr. 27	23.1--23.2	Apr. 29	24.1--24.2	
13	May 4	27.1	May 6	27.2	Quiz 6
14	May 11	27.3--27.4	May 13	28.1	
15	May 18	28.2	May 20	Exam 3	
16	May 25	28.3	May 27	28.4	
Finals	June 1	Final Exam	June 3	No Class	

* All items in this syllabus are subject to change at the instructor's discretion. If any significant change occurs, you will be notified in writing by the instructor.