Integrated 2 2024-2025

Teacher Contact Information

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Course Description

"Core Connections Integrated II is the second course in a five-year sequence of college preparatory mathematics courses. It aims to formalize and extend the geometry that students have learned in previous courses. It does this by focusing on establishing triangle congruence criteria using rigid motions and formal constructions and building a formal understanding of similarity based on dilations and proportional reasoning. It also helps students develop the concepts of formal proof, explore the properties of two- and three-dimensional objects, work within the rectangular coordinate system to verify geometric relationships and prove basic theorems about circles. Students also use the language of set theory to compute and interpret probabilities for compound events.

On a daily basis, students in Core Connections Integrated II use problem-solving strategies, questioning, investigating, analyzing critically, gathering and constructing evidence, and communicating rigorous arguments justifying their thinking. Under teacher guidance, students learn in collaboration with others while sharing information, expertise, and ideas."

Course Tools
- Dietiker, Leslie, et al. Core Connections. Integrated II. CPM Educational Program, 2022. ISBN: 978-1-60328-323-6 and also accessed through student CPM account
- The California Common Core Mathematical Standards can be found at http://www.cde.ca.gov
- Online platforms: Schoology, Delta Math, Desmos, and other platforms as needed.

Essential Learning Outcomes (ELOs)

Key concepts addressed in this course are:
- Representations of linear, quadratic, and exponential relationships using graphs, tables, equations, and contexts.
- Symbolic manipulation of expressions in order to solve problems, such as factoring, distributing, multiplying polynomials, expanding exponential expressions, etc.
- Analysis of the slope of a line multiple ways, including graphically, numerically, contextually (as a rate of change), and algebraically.
- Solving equations and inequalities using a variety of strategies, including rewriting (such as factoring, distributing, or completing the square), undoing (such as extracting the square root or subtracting a term from both sides of an equation), and looking inside (such as determining the possible values of the argument of an absolute value expression).
- Solving systems of two equations and inequalities with two variables using a variety of strategies, both graphically and algebraically.
- Use of rigid transformations (reflection, rotation, translation) and symmetry to demonstrate congruence and develop triangle congruence theorems.

- Using coordinates to prove geometric theorems.
- Geometric constructions (with compass and straightedge).
- Simple geometric proofs (investigate patterns to make conjectures, and formally prove them).
- Representations of arithmetic and geometric sequences, including using tables, graphs, and explicit or recursive formulas.
- Use of exponential models to solve problems, and to compare to linear models.
- Use of function notation.
- Statistical analysis of two-variable data, including determining regression lines, correlation coefficients, and creating residual plots.
- The differences between association and causation, and interpretation of correlation in context.
- Comparison of distributions of one-variable data.

Participation Expectations

- You are expected to be on time and present.
- You are expected to conduct yourself in a professional manner in speech, dress, and behavior.
- You are expected to participate in all class activities.

Daily Work Expectations
- You are expected to take notes on all lectures and Participate in all class activities.
- You are expected to **SHOW YOUR WORK** for all assignments that are to be turned in.

Cell Phone Policy:

As per school policy, cell phones are not allowed in class. Before the beginning of the period students need to have their phones turned off. All cell phones must be placed in students' backpacks or put in the cell phone pockets hanging from the door in the front of the class. Students using their cell phone in class will have their phone taken away and will be subjected to the school's electronic policy.

Hall Passes:

We use an electronic hall pass. Students will be using a program called Minga to sign in and out of class using their Chromebook. Students will be given a standard seven minute window of time to be out of class. Student usage will be monitored and excessive use of hall passes will result in student teacher conferences, phone calls home, or to not be allowed out of class.

Grading Policy

Assignments
You are encouraged to develop a regular study time and place. This time should be spent on organizing and reviewing your notes and other instructional materials, and practicing concepts to establish mastery. Parents are strongly encouraged to help students develop and review the weekly calendars so that they can build a study plan for the week.

In order for you to receive full credit on an assignment, the work must be complete, organized, correct and _LEGIBLE._ Students will be asked to redo and resubmit any assignments that do not meet the above criteria.

Note: Though you are encouraged to collaborate with peers when possible, all work turned in MUST be your OWN. No cheating or copying from other students or digital sources will be tolerated. All students knowingly involved will earn a "0" on that assignment and parents will be contacted.

Assessments
You will have weekly assessments to ascertain your understanding. Intervention and enrichment will be assigned, as needed. You will also have summative assessments (think: tests and finals) at the end of each learning unit and the end of each semester.

Redos and Retakes Policy

Students have the opportunity to retake any test once they complete the required intervention for that test. In order to retake tests or quizzes the following criteria must be met.

Quizzes
- All assignments that correspond to the quiz must be completed with 70% or higher.

Tests
- All assignments and quizzes that correspond to the test must be completed with 70% or higher.
- Corrections on the original test must be completed and turned in.

Student Absences

Make-up work
- For any absence, you will be responsible for getting the missed lecture notes and practice problems. All lecture notes and assignments can be found on schoology.
- Information Missed lessons can be found on Schoology. It is your responsibility to watch the lecture video/make up notes, and then complete the practice problems.
- If you know that you are going to be gone, you are strongly encouraged to get the work ahead of time.
- Work that is due the day of the absence will be due the day you return.
- If you missed an assessment due to an absence, you must take the assessment within two days of your return, outside of normal class time.

If you are planning on being gone for four or more days, an independent study contract must be obtained, by you, through the attendance office and brought to me at least two days before you leave. The assignments will be due the second day you come back.

Note for Athletes, Field Trips, Band and Choir
There are times when a school sanctioned function or activity pulls you out of class. It is your responsibility to get your assignments BEFORE you are absent. **Assignments are due the day you return.**

Recommended Materials

Instructional Material/supplies
- Pencil
- Three-ring binder
- 8 ½ by 11 college-ruled binder paper
- ¼ graph paper
- Ruler
- Chromebooks should be charged and brought to class every day.
- Scientific Calculator, phone calculators are not allowed

Mastery Levels

Grades are set at the Median, Mean and/or Mode of covered standards
5. **Mastery:**
  a. High degree of competence and skill. (e.g. Can apply knowledge successfully to new situations. Can solve all presented problems.)
  b. No standard based errors are made.
  c. Can perform expected tasks with no guidance.
  d. Makes no or very few nonstandard related errors.
4. **Proficient - Nearly Mastered:**
  a. High degree of competence and skill (e.g. Can solve all presented problems.)
  b. May make a rare standard based error.

c. Can perform expected tasks with no guidance.
        d. May make a few nonstandard related errors.
3. **Proficient:**
        a. Has a foundational knowledge of the standard. (e.g. Can solve procedural problems)
        b. Makes occasional standard based errors.
        c. Can perform expected tasks, but needs guidance.
        d. May make occasional nonstandard related errors.
2 **Developing:**
        a. Has a rudimentary knowledge of the standard. (e.g. Can set up or start problems.)
        b. Makes several critical, standard based errors.
        c. Can perform expected tasks, but needs significant prompting.
        d. Makes nonstandard related errors.
0 - 1. Emerging:
        a. Has basic knowledge of the standard. (e.g. Can state what goal is or answer should be.)
        b. Makes many critical, standard based errors or omissions.
        c. Can perform expected tasks, but needs substantial prompting.
        d. Work does not show evidence of learning
        e. Makes many non standard related errors.

NE. Standard not attempted or no evidence of mastery: Incomplete

It is highly recommended that both you and your guardian/parent monitor your grades closely online. Grades will be updated frequently. If there are any concerns, please don't hesitate to contact me.

Grading Scales

Weighted Grading Structure	
Category	**Percentage of grade**
Daily Assignments, Practice, Projects, etc.	10%
Quizzes	10%
Assessments (Tests, Finals)	80%

Grading Percentage

Grade	**Percent**	**Mastery Scale**
A	90% - 100%	5
B	80% - 89%	4
C	70% - 79%	3
D	60% - 69%	2
F	Below 60%	0-1