

Integrated Mathematics II (Carnegie Learning)

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[Course Webpage](#)

Course Overview: This yearlong course will focus on the newly established Common Core State Standards incorporating the Carnegie Learning Integrated Math II curriculum and a variety of other resources. The curricula's focus is on increasing students' complete mathematical understanding as they work with geometric relationships, coordinate planes, trigonometric ratios, and quadratic functions.

A summary of the course content follows:

Semester 1

Module 1: Reasoning with Shapes

Topic 1: Composing and Decomposing Shapes

Topic 2: Justifying Line and Angle Relationships

Topic 3: Using Congruence Theorems

Module 2: Investigating Proportionality

Topic 1: Similarity

Topic 2: Trigonometry

Topic 3: Circles and Volume

Semester 2

Module 3: Exploring Functions

Topic 1: Functions Derived from Linear Relationships

Topic 2: Exponentials

Topic 3: Introduction To Quadratic Functions

Module 4: Seeing Structure

Topic 1: Solving Quadratic Equations

Topic 2: Applications of Quadratic Equations

Topic 3: Circles on a Coordinate Plane

Grade Calculation: Students are not given an “annual” grade for a year-long course. Instead, only the 1st semester and 2nd semester final grades will be reported. This reporting method has three (3) important implications:

1. Students will now have more options when scheduling semester electives.
2. To accommodate the increased number of elective scheduling possibilities, some students may need to take two different sections of the same course for the 1st and 2nd semesters of a year-long course. This would lead these students to change periods (or even teachers) at the winter break.
3. Students will now need to pass both semesters of a year-long course. A passing grade in high school is “60”. If a student fails a semester, then he or she will need to attend summer school to remediate that semester. If a student fails both semesters, he or she will need to attend summer school to remediate both semesters.

First Semester Grade Calculation: Your first semester grade will be calculated according to:

<u>Aspect</u>	<u>Weight</u>
1st quarter grade	40%
2nd quarter grade	40%
Final semester exam	20%

Second Semester Grade Calculation: Your second semester grade will be calculated according to:

<u>Aspect</u>	<u>Weight</u>
3rd quarter grade	40%
4th quarter grade	40%
Final semester exam	20%

Quarter Grade Calculations: Your 1st, 2nd and 3rd quarter grades will be calculated according to:

<u>Aspect</u>	<u>Weight</u>
Tests	50%
Independent Learning (MATHia and Homework Quizzes)	20%
Project	15%
Classwork	10%
Preparedness	5%

Your 4th quarter grade includes the *Week Without Walls (WWW)* grade and will be calculated as:

<u>Aspect</u>	<u>Weight</u>
Tests	45%
Independent Learning (MATHia and Homework Quizzes)	18%
Project	13.5%
Classwork	9%
Preparedness	4.5%
Week Without Walls (WWW)	10%

N.B. It is the student's responsibility to save all returned graded material in case it is needed to settle any subsequent grade dispute. In other words, don't throw away any graded work.

Exemption from Semester Final Examination: It is no longer possible to exempt a semester final examination in mathematics for the following reasons:

- Enhanced Learning and Retention: The spiral review that occurs during exam preparation is crucial for deepening understanding and improving long-term retention of the content. This foundational knowledge is essential for successfully progressing to the next set of topics.
- Additional Demonstration of Proficiency: Semester Exams offer students another chance to demonstrate their mastery of newly learned material, especially if they could not do so on earlier assessments, such as unit tests.

Tests: There will be three tests per quarter.

Independent Learning (MATHia / Homework Quizzes): Approximately half of the Independent Learning grade will be calculated by the *successful completion* of the assigned MATHia workspaces during a quarter. Most students are somewhat familiar with MATHia as it was employed in the 8th grade Integrated Math I course. In short, MATHia is an independent learning software platform produced by Carnegie Learning that is designed to be used in parallel with the MATHbook.

Successful completion means that the student successfully completes the workspace according to the MATHia grading algorithm. A successfully completed workspace will appear "green" on the teacher's MATHia dashboard; an unsuccessfully completed workspace will appear as "red". Unfortunately, due to the limitations of the platform, students cannot determine if their workspace is red or green, so they must depend on the teacher's feedback.

MATHia is designed to be used in the classroom under your teacher's supervision, not at home. Therefore, MATHia workspaces will be assigned as homework on very rare occasions only. MATHia workspaces are to be done independently by the student - no student should ever be "helping" another student with a MATHia assignment. Though rather obvious, but for clarity's sake, it should be clear that a tutor should never assist a student with a MATHia assignment. If a student is caught completing MATHia workspaces outside his or her assigned period's class time, a zero grade for the entire assignment will be entered and the student will be referred to administration for academic dishonesty.

Projects: There will be one project per quarter, the details of which shall be announced at a later date.

Classwork: This is a semi-subjective grade given on the basis of a student's participation, attitude, conduct and ability to follow instructions. At the teacher's discretion, each time a student engages in significant class misbehavior or disruption that interrupts the flow of the class (e.g. cell phone possession, asking for an AC adaptor, side conversations during didactic lecture, etc.), he or she will receive a one-point deduction from the quarter grade (out of ten). If a pattern develops, the student will be counseled. If no improvement is seen and the problem persists, the student will be referred to the Assistant Principal for other consequences he deems suitable.

Preparedness: This is an objective grade given on the basis of a student's ability to follow instructions and arrive prepared for class. At the teacher's discretion, each time a student arrives to class "unprepared" (see below), he or she will receive a one-point deduction from the quarter grade (out of ten). If a pattern develops, the student will be counseled. If no improvement is seen and the problem persists, the student will be referred to the Assistant Principal for other consequences he deems suitable.

Materials: To be "prepared" each day, each student needs to bring all of the following items to class every day. Your teacher refers to these things as, "the usual". On occasion, you will need to bring "special" items that are not part of the standard list of materials. Always review the small whiteboard near the door, before class, to be sure you have all of the requested special items. In addition to the daily supplies outlined below, each student will need approximately 600 pesos "on-demand" to fund the quarter projects through the course of the year.

The Usual

1. Your school-issued MacBook, fully-charged and with recommended software installed (more on this later).

2. Your assigned MATHbook (correct volume, please), Your **full name** (first and last, no nicknames) and **period** must be written in permanent ink on both the inner and outer portions of the front cover.

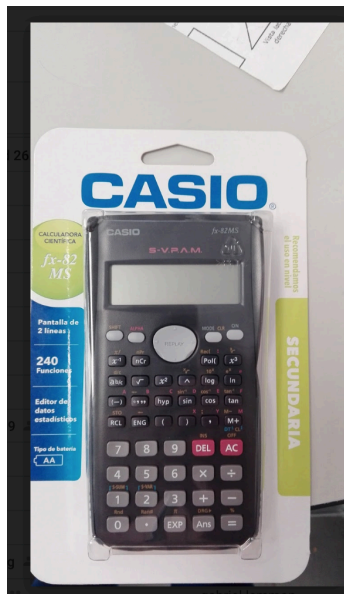
3. A pencil, an eraser, and a pencil sharpener (or extra lead). We never use ink in this course, even if it is erasable.

4. One spiral-bound notebook, 8 ½” x 11”, graph-paper type, for notetaking, MATHia work and other math practice. Write your **full name** (first and last, no nicknames), **period**, and “**Integrated Math II Notebook**” neatly and prominently on the front cover. Only Integrated Math II work goes in this notebook. It cannot be “shared” with any other course.

If you are a Support Integrated Math II student, please use a separate notebook. No support math work should be present in the Integrated Math II Notebook.

5. A ruler, protractor and a compass. Here is [Tio Rico's Compass Buying Guide](#) for your review. Do not buy a compass until we have discussed the various options in class.

6. A Casio fx-82MS scientific calculator. The calculator can be purchased at the on-campus bookstore for under 200 pesos. A photograph of the calculator follows:



7. An AC adaptor to facilitate MacBook charging from a floor outlet. Please put your name on it with a permanent marker to discourage theft.

Sharing of implements: No implements of any kind (calculators, MacBooks, MATHbooks, pencils, erasers, sharpeners, rulers, etc.) shall be shared between students.

Extra Support:

Support Integrated Mathematics II: This is a formal course that offers extra support for students who have been identified as having a high probability of struggling in obligatory Integrated Mathematics II. You will know if you are enrolled in this course.

VIP Club: TBD

Office hours: Everyday, 7:15 - 7:50 am in Room 112.

Course expectations

- Respect your teacher, classmates, school and yourself. Use given names, not nicknames.
- MATHbook is a complete resource, but your teacher will frequently give brief didactic lectures to review related topics. Students should take notes in their spiral notebook in a dated, chronological, complete and orderly manner. If you miss class, get the lecture notes from a colleague. As a general guide, if something is written (or projected) on the board by your teacher, it should probably be written in your notebook.
- Be responsible by being prepared, studying conscientiously and practicing at home, even if this is no “assigned” homework.
- Be honest with yourself and everyone else. **Specifically, never discuss or ask about the content of a quiz, test or semester final examination (globally referred to as evaluations) with a colleague until the evaluation has been returned to you.** If you do, and it can be proven or logically inferred, you will be referred to the Assistant Principal for academic dishonesty and given a "zero" on the evaluation.
- Do your best at all times.
- Learn and enjoy math.