Integrated Math III 1st Semester 2018 **Grading Policy Guidelines**

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Getting To Know The Textbook: We are using Carnegie's Integrated Math III consumable textbook. This means that students will engage in the material by tearing out and working on written activities and by working online using Mathia. The book is broken down into 5 modules. Each module has approximately 3 topics. Within each topic there are anywhere between 2 and 6 lessons. Each lesson will typically have a warm up, multiple activities, and then a homework section. Mathia this year will also have 5 modules that align directly to the modules in our textbook.

Welcome To Standard Based Grading: This year I have moved to standard based grading. What this means is that the student will be judged highly on the level of mastery they achieve on each essential outcome. An essential outcome is a learning goal or skill that the student needs to master in order to be successful in the next level of mathematics.

Each essential outcome will be judged on assessments with mastery levels at a 5, 4, 3, 2, 1, or 0 as defined below:

5	Advanced Master
4	Mastery
3	Basic Mastery
2	Heading Towards Mastery
1	No master
0	No honest attempt to show mastery level

Instead of the gradebook being broken into sections like quizzes, tests, class participation, homework, etc. It will consist of the essential outcomes/standards with percentages based on the importance of those essential outcomes, and then one section called formative work. Formative work will be broken into your Mathia Workspace scores, classwork, projects or other explorations that will help you prepare for that particular standard. Retakes will be allowed based partly on the completion of your formative work at a high percentage. To earn further retakes on an essential skill, the student may be required to complete other work.

Some students can master skills by doing less, while others need to do everything to wrap their brain around a concept. The Formative work grade allows a student to decide how much they need to do, in order to earn success; an important skill they will need to learn to succeed not just in high school, but in order to be successful in the real world, too.

Please note that the percentages for each essential outcome are best estimate
and may be modified to take into account the actual pacing of the class to best meet the needs of my students.

Why Standards Based Grading: In the most simple of answers, because it is best for students. Instead of getting credit based on effort, student earn grades based on how well they have mastered an essential outcome. If students do not like their grade, they can look at what essential outcomes they have not mastered and take advantage of a retake or a good metacognition grade to raise that mastery in the future. This type of grading not only holds students accountable for what they know, but changes the conversation from "How can I raise my grade?" to "I see that I am having problems mastering this essential outcome, can you please help me understand so that I can improve my mastery level?" Conversations like these will help students take ownership of their own learning and better facilitate communication between students, parents, and myself in regards to content areas of strength and weakness.

Standards Grade Break Down for IM3 2018:

Skill #	Standard	Percentage
Number and Quantity: N.CN 1%		
1	Extend Polynomial Identies to Complex Numbers (N.CN.8)	
	Total this Standard	**1**
Algebra: A.SSE 9%		
2	Interpret parts of an expression, such as terms, factors, and coefficients. (A.SSE.1a)	
3	Interpret complicated expressions by viewing one or more of their parts as a single entity. (A.SSE.1b)	
4	Use the structure of an expression to identify ways to rewrite it. (A.SSE.2)	
	Total this Standard	**9**
Arithmetic with Polynomials and Quadratic: A.APR 9%		
5	Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. (A.APR.1)	
6	Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. (A.APR.3)	
7	Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity (x2 + y2)2 = (x2 – y2)2 + (2xy) 2 can be used to generate Pythagorean triples. (A.APR.4)	
	Total this Standard	**9**
Create Equations that describe numbers and relationships: A.CED 9%		
8	Create equations and inequalities in one variable including ones with absolute value and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. (A.CED.1)	
9	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. (A.CED.2)	
10	Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. (A.CED.3)	
	Total this Standard	**9**
Reasoning with Equations and Inequalities A-REI 4%		
11	Explain why the x-coordinates of the points where the graphs of the equations y = f(x) and y = g(x) intersect are the solutions of the equation f(x) = g(x); find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where f(x) and/or g(x) are linear, polynomial, rational, absolute value, exponential, and logarithmic functions. (A.REI.11)	
	Total this Standard	**4**
Interpreting Functions F-IF 23%		
12	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. (F.IF.4)	
13	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. (F.IF.5)	
14	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. (F.IF.6)	
15	Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. (F.IF.7c)	
16	Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. (F.IF.8)	
17	Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. (F.IF.8a)	
18	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). (F.IF.9)	
	Total this Standard	**23**
Interpreting Functions F-BF 5%		
19	Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model. (F.BF.1b)	
20	Identify the effect on the graph of replacing f(x) by f(x) + k, kf(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. (F.BF.3)	
	Total this Standard	**5**
	Total ALL Priority Standards	60

Formative Work N.CN	0.5
Formative Work A.SSE	4.5
Formative Work A.APR	4.5
Formative Work A-CED	4.5
Formative Work A.REI	2
Formative Work F.IF	11
Formative Work F.BF	3
Formative Work Total	30
Final Exam	10
Final 1st Semester Grade	100