Course of Study: Math Analysis (2022-23) with Mr. Ziemnik

Math Analysis is a full year course designed to explore concept units in: **Polynomials and Rational Functions**; **Complex Numbers and Rational Exponents**; **Metrics** (How do metrics allow us to solve problems that are difficult to mathematize?); **Exploring Models** (What are the different ways we can represent quantitative and categorical data? Which measurement tools are most useful for different situations?); **Constructing Models** (How can functions be used to represent financial models? How are risk and benefit quantified and analyzed using models?); **Modeling Likelihood** (How likely are random events to occur? How can we represent and analyze probabilities?); **Modeling Decision-Making** (How can probabilities be used to analyze and make fair decisions? How likely are random events to occur?); **Inference: Evaluating Models** (How is variability in data best characterized? How can we use samples to draw valid conclusions about a larger population?); and **Imprecision** (How can we use imprecision, estimation, approximation, and rounding to make sense of real-world situations?)

Needed Materials for class:

- Dry Erase Markers
- Three-ring binder or spiral notebook or composition book
- Macbook
- Pencil
- 8 ½" by 11" paper or spiral notebook
- Graph paper
- TI-83 or TI-84 Graphing Calculator (suggested if already have)

Grade Determination:

- **70% - Concept End of Unit Assessment and/or Final Product for a Concept Unit**
    - Students receive grades for their demonstration of math concepts in each concept unit.
- **10% Portfolio Problems/Cooldowns/Exercise Sets**
    - Students receive grades for their demonstration and application of unit concept skills
    - This may also include successful completion of cooldowns, exercise sets, and/or homework assignments
- **14% of a student's grade is based on mastering Power Focus Areas**
    - Students pass a Focus Area by passing Content Assessments (at least 8/10)
- **6% of a student's grade is based on mastering Additional Focus Areas**
    - Additional Focus Areas are not required, but they count toward a student's grade (at least 8/10)

NOTE TO PARENT(S)/GUARDIAN(S): Please login to https://www.summitlearning.org/parents/login to view detailed information about your child's progress.

Classroom Policies:

1. Follow directions and expectations.
2. Use appropriate language, sounds, movements, and gestures.
3. Respect all school property and equipment.
4. Respect your classmates and any teacher.
5. Be prepared for class.

Keys to Success:

- Keep up on a daily basis.
- Make a positive contribution to the class and engage in mathematics.
- Ask questions.
- Practice, Practice, Practice!
- See the teacher for extra help if you are having any difficulty. Mr. Ziemnik wants the students to be successful.

Consequences for choosing to break the classroom policies:

- First Infraction: warning
- Second Infraction: one-to-one private discussion, possible call to parent(s)/guardian(s)
- Third Infraction: possible detention, call to parent(s)/guardian(s)
- Fourth Infraction: possible meeting with parent(s)/guardian(s), possible detention
- Continued or Severe Infractions: sent to administration

NOTE: Depending on the severity of the situation, the order of these consequences may change.

Why Study Mathematics? (taken from the Ohio Mathematics & Science Coalition):

- To prepare for high-paying and high-quality jobs that improves one's quality of life.
- To support our country's economy, workforce, and national defense.
- To gather and understand information, think critically, and become good problem solvers.
- To build an understanding of natural phenomena and human made devices and systems.
- To be well-informed and better-prepared members of a community.
- To appreciate the beauty and complexity of the arts, nature, and so much more of our world.

Contact Information for Mr. Ziemnik:

School Phone: 440.356.3510 ext 3137

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Important link for daily agendas and assignments:

Today in Math Analysis: **tinyurl.com/MathAnalysis2022-23**

Please also see: MR. ZIEMNIK'S FREQUENTLY ASKED QUESTIONS & CLASS PROCEDURES FOR MATHEMATICS 20212-2023

I am signing this because I have read the Math Analysis (2022-23) with Mr. Ziemnik
Course of Study, MR. ZIEMNIK'S FREQUENTLY ASKED QUESTIONS & CLASS PROCEDURES FOR MATHEMATICS 20212-2023 and understand the classroom rules and grading policies.

_____ Student's name, printed	
_____ Student signature	_____ Date
_____ Parent's name, printed	
_____ Parent signature	_____ Date

****Please return the signed portion to Mr. Ziemnik. You can cut the paper at the dashed line.**