Thornton High School
9351 North Washington • Thornton, CO 80229
Office: (720) 972-4800 • Fax: (720) 972-4999
http://www.thorntonh.adams12.org

Adams12 Five Star Schools

School Year	2017-2018	**Teacher Name**	Drew Rosalies
Office	527/509		
Phone	720-972-4803	**OFF Hours:**	2nd, Lunch, 7th, and after school when available
Email Address	andrew.d.rosalies@adams12.org		

Course Name	**Math Analysis**
Course Description	Math Analysis courses include the study of polynomial, logarithmic, exponential, and rational functions and their graphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity. They may also include some study of trigonometry and/or pre-calculus topics. Elementary Functions courses, while preparing students for eventual work in calculus, include the study of relations and functions, including polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their inverses, graphs, and applications.

Unit of Study	Grade Level Expectations/Content Standards	Approximate Time Spent or Percent of time Spent	Targeted Date of Assessment
Algebra (Notation and Equations)	Students will be able to use and apply the following: algebraic notation, algebraic substitution, linear equations, rational equations, linear inequalities, problem solving, money and investment problems, motion problems, and mixture problems	@ 15 days or 4 weeks	September 16
Algebraic Expansion And Factorization	Students will be able to use and apply the following: revision of expansion laws, revision of factorization, further expansion, binomial expansion, factorizing expressions with four terms, factorizing quadratic trinomials, factorization by splitting, miscellaneous factorization	@ 12 days or 3 weeks	October 7
Radicals and Surds	Students will be able to use and apply the following: basic operations with radicals, properties of radicals, multiplication of radicals, division by radicals, equality of surds	@ 8 days or 2 week	October 14
Quadratic Equations	Students will be able to use and apply the following: quadratic equations of the form $x^2 = k$, solutions by factorization, completing the square, problem solving, quadratic formula	@ 8 days or 2 weeks	October 28
Algebraic Fractions	Students will be able to use and apply the following: simplifying algebraic fractions, multiplying and dividing algebraic fractions, adding and subtracting fractions, more complicated fractions	@ 8 days or 2 weeks	November 11
Counting & Probability	Students will be able to set up & compute factorials; apply & calculate permutations; apply & calculate combinations; solve applications involving permutations & combinations	@ 13 days or 4 weeks	December 9
Pythagorean's Theorem	Students will be able to use right triangle trigonometry to solve for missing sides & angles; use similar figures to find missing sides & angles; calculate the slope, distance & midpoints between two points; use triangle & parallel & perpendicular line properties to find missing angles	@13 days or 3 weeks	January 20
Coordinate Geometry	Students will be able to calculate the distance between two points; midpoints; gradient (slope); using coordinate geometry; equations of straight lines; distance from a point to a line; 3-D coordinate geometry	@17 days or 4 weeks	February 17

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Trigonometry	Students will be able to write and solve trigonometric ratios; trigonometric problem solving; 3-D problem solving; the unit circle; area of a triangle using sine; apply the sine & cosine rules to problem solving; trigonometric identities	@14 days or 3 weeks	March 10
Relations, Functions & Sequences	Students will be able to identify relations and functions; function notation; composite functions; inverse functions; where functions meet; number sequences; recurrence relationships	@20 days or 4 weeks	April 14
Exponential Functions & Logarithms	Students will be able to apply index laws; rational (fractional) indices; recognize, graph & use the graph of an exponential equation to make predictions & to model growth & decay; compound interest; depreciation	@15 days or 3 weeks	May 5

Grading Scale		**Grade Percentages/Weights**		**On group projects, students will receive a grade for individual work and a group grade**	
A	90-100	**Summative Assessments & Projects**	**80%**		
B	80-89	**Formative Assessments & Projects**	**20%**	**Individual Grade**	80%
C	70-79			**Group Grade**	20%
D	60-69	***Weekly progress grades are posted at https://ic.adams12.org/campus/portal/adams12.isp**		**Grades are based on achievement of Content Standards and Grade Level Expectations.**	
F	59 or below				

Class Expectations

Missing or incomplete assignments/assessments for this course: Superintendent Policies 6280 Homework and 6281 Make-Up Work, will be followed for this course.

Student Expectations

Behavior Policy

- Each student is expected to behave **appropriately and respectfully** to the teacher and towards other students
- Each student is expected to **comply with "reasonable requests"**
- Each student is expected to **come to class prepared and on time**

Cell Phone/Music Policy

- Students will be given **one verbal warning** at the start of class each day to turn off & put away their phones/music
- You may only listen to music at the teacher's discretion & with their verbal permission.
- Any phones/ music **out after the 1st warning will be taken & Superintendent's Policy will be followed:**
  - **1st offense:** The device should be confiscated and the parent should be notified. The device may be released to the STUDENT after the student reviews and signs the policy.
  - **2nd offense:** The device should be confiscated and the parent should be notified. The device may be released ONLY to the PARENT after the parent reviews and signs the policy.
  - **3rd or more:** Such offenses are considered disruptive behavior and should result in a minimum of one day suspension to be served in or out of school at the discretion of administration. Subsequent violations may result in increasing suspensions of up to three (3) days.
- The phone **can be retrieved at the end of the school day, either from the teacher or in the Attendance Office.** If the student wishes to have it returned to them earlier, they must speak with their dean.

General Expectations

- Grades are based upon the demonstration of proficiency on units associated with a standard given during each formative or summative assessment. Formative grades in addition to summative unit assessments will be used to holistically determine your grade.
- On group projects, students will receive a grade for individual work and a group grade.
- Grades are based on achievement of Content Standards and Grade Level Expectations.
- Assessments will be graded based on teacher/district/state rubrics.
- **Formative: 20%** Formative assessments measure the scaffolding skills and/or content embedded in the unit. Formative assessments are taken frequently, after a student has practiced a skill or become familiar with content. Examples of formative assessments include but are not limited to exit tickets, paragraphs, oral check for understanding, warm-ups, stages in a large project, etc.
- **Summative: 80%** Summative measures of achievement are taken when unit master is expected. (i.e., unit tests, culmination of a project, embedded assessments, etc.)
  - If no attempt to take a summative assessment has been made, a "no evidence" (NE) grade will be recorded until the assessment is completed. NE shall be defined as not attempting the assessment or not being present for the assessment. **NE will be equal to 0%.**
  - In order to receive a passing grade, a student must **attempt ALL summative assessments**.

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- The presence of an NE grade for any summative assessment at the end of a grading period will result in a grade of F for the course, regardless of performance on other assessments..

Grading Policy

- According to District Policy, **students will no longer receive below a 50% on any "good faith" attempt** for work on Formative and Summative Assessments. Students who score below a 50% will receive a "BF" or "Below Fifty" mark, which translates to a 50% in the gradebook.
- However, on **Summative Assessments ONLY**, if a student is absent, did not make a "good faith" attempt or did not show enough evidence of learning the objectives, the student **may receive a "NE" or "No Evidence" mark**, which translates to a **0% in the gradebook**.
- This is how marks will appear in the gradebook:
  - M (50%) = missing (**ONLY** used on **Formative** Assessments)
  - NE (0%) = absent/did not attempt/not enough evidence of learning (**ONLY** on **Summative** Assessments)

Re-Take Policy

- First and second **semester final exams ARE NOT** eligible for a retake.
- A student is allowed to **retake any Summative Assessment** up to ten (school) days after the original Summative Assessment has been graded and communicated to the student. After the ten days, the eligibility for the retake will expire unless prior arrangements have been made and approved by the teacher.
- All **retakes** will be for **full credit**.
- In order **to retake a summative assessment**, **students must show a reasonable body of evidence of learning** (to be determined by the teacher). Some examples of this could be a study session with the teacher, re-doing formative assessments, extra practice outside of class, etc. This process must be completed within the existing 10 day THS Retake Policy.

Student and Teacher Responsibilities with Regards to Summative Assessments

- **Teachers will be responsible** for communicating NE grades to students. Some examples of this include (but are not limited to): having the student take the NE assessment the next time they are in class; calling home to communicate the NE assessment to parents; having a student make up the NE assessment during a specific off hour, extensions period or lunch, etc.
- If a student is going to fail a semester because of a NE, the **teacher must call home to communicate with the parents** (as per Superintendent policy). This must be done in such a way that it gives students enough time to make up the NE assessment.
- It is the **responsibility of both the teacher and student** to discuss and determine a mutually agreed upon time frame for when the student can make up the NE assessment. If the student fails to meet the given deadline, documentation must be provided in PLP.
- It is the **responsibility of the student** to make up any NE assessments as soon as possible in order to protect his or her eligibility and his/her GPA.
- If a student receives an NE on a final or semester exam, it is the **student's responsibility** to provide documentation and to make arrangements with administration to take the missed assessment(s).
- Summative assessments must be taken within a reasonable amount of time after they are first given unless otherwise arranged with the teacher. It is the student's responsibility to know when assessments are given and schedule a time to make them up or retake them.