

Course Information:

Course Name: **Advanced Mathematics**

Prerequisites: Completion of Algebra 1, Geometry, and Algebra 2 with recommendation of teacher

Tools/Materials Needed: Graphing Calculator

Textbook: Advanced Mathematics , A Precalculus (Course (Houghton Mifflin 2000))

Contact Information:

Instructor: Terry Szerlong

Room number: 14

Conference/Preparation: 3rd Hour 9:58-10:49

School Telephone: 231-352-4781 ext. 212

Home Telephone: 231-352-9219

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Course Description:

Advanced mathematics is for the student who would like a solid preparation for college mathematics or entrance examinations. It presents a course in precalculus topics. It is intended for above average students who have completed two years of high school algebra and one year of geometry. Geometric concepts are integrated with algebraic concepts in the first part of the course. Trigonometry is covered during the second half of the course.

Course Outline/Topics:

linear functions; quadratic functions; zeros and factors of polynomial functions; graphs of polynomial functions; polynomial equations; inequalities in one variable; inequalities in two variables; properties of functions; graphs and inverses of functions; applications of functions; exponents; logarithms; analytic geometry; angles, arcs, and sectors; trigonometric functions; trigonometric equations; trigonometric identities; applications of sine waves; triangle trigonometry; trigonometric addition formulas

Goals and Objectives:

To review and expand work with coordinate geometry.

To investigate the properties of polynomials.

To solve quadratic equations and graph their solutions.

To solve problems involving logarithmic and exponential functions.

To solve equations having complex roots or coefficients.





To convert between degree and radian measure also apply radian measure.

To simplify trigonometric expressions, prove trigonometric identities and solve trigonometric equations.

Mr. Szerlong's Class Schedule (revised 8-28-07)**2007-2008**

1 st Hour	8:05-8:57	Integrated Math I
2 nd Hour	9:02-9:53	Integrated Math I
3 rd Hour	9:58-10:49	Preparation
HS Lunch	10:49-11:24	Lunch
4 th Hour (HS)	11:24-12:14	Integrated Math II
5 th Hour	12:19-1:11	Advanced Math
6 th Hour	1:16-2:08	Geometry
7 th Hour	2:13-3:05	Pre-Algebra 8

Mr. Szerlong **Uniform Grading Scale** **2007-2008**

100%	<	A+		
93%	≤	A	≤	100%
90%	≤	A 	<	93%
87%	≤	B+	<	90%
83%	≤	B	<	87%
80%	≤	B 	<	83%
77%	≤	C+	<	80%
73%	≤	C	<	77%
70%	≤	C 	<	73%
67%	≤	D+	<	70%
63%	≤	D	<	67%
60%	≤	D 	<	63%
0%	≤	E	<	60%

Mr.Szerlong Rules/Guidelines/Information 2007-2008

Each marking period grade will be determined by averaging points earned from tests, quizzes, class assignments, class participation, preparation for class, assigned notes, homework. No extra credit. Semester grades will be calculated using the individual percent earned for each of the marking periods and on the final exam. Individual marking period grades will equal 40% of the semester grade. The exam will equal 20% of the semester grade.

Guidelines to receive credit are as follows:

1. Students are required to come to class prepared and are assigned to have their notes, homework, book, calculator, pencil, and handbook in class when the bell rings.
2. For any written assignment, students must have their first and last name along with an assignment description legibly written in the upper right-hand corner of the front page. The students first and last names must be legibly written in the upper right corner of all subsequent pages.
3. Written work must be legible, without scribbling, without doodling, without ink, and done in pencil.
4. Students must communicate all major steps and calculations leading to a problem's answer in an organized manner which documents their problem solving strategy/process on paper.
5. Answers must be in exact, simplified, or specified form as defined in the problem, by our books, or as stated in class as policy. Examples: Geometry requires specific notation to distinguish a line segment from a line or distance between two points on a line. Fractions, when directions are not specified, are always to be reduced to lowest terms. A decimal equivalent may be substituted (unless specified otherwise) for fractions (like $1/8$) that can be expressed as a terminating exact decimal. Fractions (like $2/3$) that cannot be expressed as a terminating exact decimal should remain in the form of a fraction with a definite numerator and denominator, completely simplified and not rounded. A fraction that can be expressed as a repeating decimal may be expressed as such (with the proper notation) unless specifically directed to express as a fraction.
6. Students may not share or trade calculators or materials during tests. It will be considered cheating.
7. Students are assigned/required to construct a personal set of notes for use during testing. The privilege to use these notes depends on adherence to the following guidelines:
 - A. Notes must be neatly bound in a ring or spiral notebook. Stapled papers are unacceptable. Excessively tattered, bent, torn, or soiled notebooks are unacceptable.
 - B. The student's name must be legibly written in the upper right-hand corner of each page.
 - C. Notes must be handwritten and legible. Machine generated notes are unacceptable.
 - D. Notes should follow an organized format with a chronological order paralleling the presentation of materials in class.
 - E. Content will be limited to math rules that have been presented in class such as definitions, formulas, procedure lists, postulates, theorems, and corollaries. There will be no scribbling, doodling, or any writing that deviates from the acceptable content described. Anything extra may be considered as cheating.
 - F. There may be tests or quizzes for which no student will be allowed the use of notes. (For example a test may ask for students to state a particular math rule.)
8. Since the notes used during testing are limited in content, students are encouraged to keep a separate set of notes to be used as a study tool. These notes are optional and should contain any other information that the student feels is important such as a completed example problem.
9. Students must follow the handbook rules for assignment make-up due to an absence.

Lesson plan lists are posted in room 14. A weekly update of assignments and tests will be written on the board.

Communication is the first step for a student to get help. You are welcome to come to my classroom for help anytime. If I am teaching another class, assistance will be given as priorities with my assigned duties will allow. If you need help before school starts in the morning, during lunch, or after school please communicate so that I can make myself available.

Students are required to be in their assigned seat and be prepared with materials for class when the tardy bell rings. No student will be allowed to leave the classroom once the bell has rung except in cases of an emergency, using the restroom, or if the student is called out of class by another staff member. For all travel in or out of the room, students will be required to properly use handbook passes.

Students are reminded that they are required to read and make themselves aware of the material presented in the student handbook. Any action distracting, slowing, or stopping the goals of the educational process will be considered as inappropriate classroom behavior.

2007-2008

Book Assignments and Condition

Print your name. _____

Write your textbook number.

Circle the this class hour. H1 H2 H3 H4 H5 H6 H7
12

Circle your class grade. 7 8 9 10 11

Write the title of your assigned book.

Circle the condition of your book.

- 0. New
- 1. Normal wear for years in service.
- 2. Book binding loose, pages marked up, cover damaged.
- 3. Torn pages, binding and/or cover broken and marked heavily, writing on 25% or more of pages.
- 4. Beyond help.

Write a detailed description of your textbook condition on the back of this paper.

Write the date that you were issued your textbook. ____ / ____ / ____ Date book returned. ____ / ____ / ____

Parent or Guardian Information

Name #1	_____	Name #2	_____
Relationship	_____	Relationship	_____
Address	_____	Address	_____
E-mail	_____	E-mail	_____
Telephone	_____	Telephone	_____

Previous Math Class Information

Write the name of your last math class

Write the name of your last math teacher and school.

Signature

Please sign below to acknowledge receiving, viewing, or completing all of the following materials:

- 1. Mr. Szerlong's Class Schedule
- 2. Grading Scale
- 3. Rules/Guidelines/Information
- 4. Book Assignments and Condition
- 5. Parent or Guardian Information
- 6. Previous Math Class Information.

If different from office records, print your "also-known-as" first name. Example: Bob for Robert.

Write the date. ____ / ____ / ____ Sign your name.