**** ****

**Honors Pre-Calculus Course Syllabus (2018-2019)**

**Instructor:** Mark A. Mentzer, PhD

**Contact Information:**

 Email: mamentzer@thesalisburyschool.org

 School phone: 410-742-4464 ext 179

**Text:** *Precalculus with Limits* by Larson and Hostetler

**Syllabus**

In this course I will prepare you for the study of AP calculus. But we’ll also delve into some very important mathematics in its own right. We’ll “spiral back” on many of the concepts you studied in your courses in geometry, algebra, and finite mathematics. We’ll solidify principles and expand your thought processes and problem-solving methodologies in new and unexplored arenas.

Our textbook for the course is Larson, R., Hostetler, R., ed. (2007). *Precalculus with Limits*. Belmont, CA: Brooks/Cole Cengage Learning. This is a very good book, and a valuable tool for helping you “get at the concepts.” Your personal academic strategy for meaningful learning should assimilate various learning tools in a manner that addresses your preferences, strengths, perspectives, and learning styles. I will facilitate your learning process. It is your responsibility to effect a learning methodology that works best for you.

I will set out to cover all 12 chapters in your text. And I will augment the topics detailed in your book with insights, applications, thought processes, and modeled problem-solving behaviors that will serve you well in your many endeavors. I will ascertain your personal “starting points” and provide guidance and support in “shoring up the gaps” so that each of you achieves personal success in the augmentation of your knowledge schema with the richness of mathematics. I thoroughly enjoy this process; and my aim is for you to share in the joy of the connectivity of scientific thought processes with pure and applied mathematics.

**Our topical coverage textbook framework follows:**

Chapter 1 Functions and Their Graphs

Chapter 2 Polynomial and Rational Functions

Chapter 3 Exponential and Logarithmic Functions

Chapter 4 Trigonometry

Chapter 5 Analytic Trigonometry

Chapter 6 Additional Topics in Trigonometry

Chapter 7 Systems of Equations and Inequalities

Chapter 8 Matrices and Determinants

Chapter 9 Sequences, Series, and Probability

Chapter 10 Topics in Analytic Geometry

Chapter 11 Analytic Geometry in Three Dimensions

Chapter 12 Limits and an Introduction to Calculus

|  |  |
| --- | --- |
| **Student Guidelines** | * Come to class on time and fully prepared. You should anticipate new subject matter by reading ahead in the appropriate sections of the book. I will discuss techniques for effective reading of technical textbooks.
* Classroom discussion will emphasize important topics and serve to reinforce your understanding
* Please raise your hand if you have a question or if you need to leave the classroom. No talking while other students or teacher is talking or writing on the board.
* For each class you should have in your possession several sharpened pencils, a composition book, a calculator (TI -84, TI-83), our textbook, and a laptop. It will benefit you greatly to remain organized- in your academic strategy and your class materials.
* All tests and homework shall be completed in pencil. Points are deducted for tests or homework completed in pen.
* You may bring a water bottle to class.
* Cell phones are not allowed in class.
* Complete all assignments, and stay on task. Homework will be posted on Whipple Hill. You will find all necessary work on Whipple Hill when you are absent from school.
* Daily homework will be assigned. Most days it will be graded. Extensions may be granted in the event of illness. Important Note: All work must be shown and instructions followed to receive full credit.
* The Salisbury School Honor Code prohibits cheating or plagiarism. All work bearing your name implies that you did not receive unauthorized assistance. This includes and is not limited to: exams, quizzes, projects, and some homework activities. There will be some class, group and workshop activities that are excluded from this rule.
 |

|  |  |
| --- | --- |
| **Grading Policy****Making Up Assessments** | Tests - 40% Quizzes - 25% Homework- 25%Exams- 10%It will be the student’s responsibility to schedule any required make-up assessments. |

**Late/Incomplete Work**

It is vital to student success for students to turn in work when they are present in class. In order to better prepare students for the rigors of college, freshman and sophomore students may submit any course work up to 1 week late at a penalty of 50%, and no late work will be accepted from junior and senior students. In the event that a student is absent, please refer to “Assignments Due During an Absence.” Additionally, partially complete work must be accepted and graded according to the amount completed or the rubric for the assignment. No teacher can reject an incomplete assignment.

**Assignments Due During an Absence**

The nature of the Upper School academic program requires that students make up all work missed due to absence from class. On the first class of the student’s return to school, the student is required to meet with the teacher of the classes that were missed in order to obtain and discuss the nature of the missed assignments and any missed instruction. Students will have two times the number of class periods missed of that course to complete work missed due to that absence without penalty. Teachers will provide assignments for students when they return from an absence and will have posted the work on the class webpage. As most assignments are based upon activities or discussions in class, teachers are not expected to provide assignments prior to a planned absence from class. Previously issued assignments and projects that were due on the day that the student was absent from class will be due the first class period of that course after his/her return to school. If a student is absent on the day of a quiz or test, the teacher will communicate with the student regarding when he/she is responsible for making up the assessment, but it must be done within a week’s time.

5pts: Read this syllabus, and have this sheet signed and returned before the next class meeting.

I have read the syllabus and understand the criteria by which I will be evaluated:

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Name (printed):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student phone number, for texting homework updates \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Name (printed):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_