2021-2022 Course Syllabus Pioneer High School

Course Title: Pre-Calculus Instructor: Mr. Ryan Hansen Room: C323 **<u>E-mail</u>**: hansenr@aaps.k12.mi.us <u>Website</u>: www.HansenMath.com <u>Twitter</u>: @HansenMath

Introduction: Welcome to Precalculus! It is a true privilege to be working at Ann Arbor Pioneer and I am excited to dig in and work collaboratively with my students this academic year. I strive to provide the opportunity and atmosphere for students to express themselves and learn everything they can. I will make myself available to answer student and parent questions in a timely fashion. I will do my best to answer any question I am asked - within reason - or seek out the appropriate information as needed. More information on my credentials and background can be found via my website: <u>www.HansenMath.com</u>

Course Description: This course is designed for students expressing above-average interest in Mathematics and is geared toward preparing students for Calculus. Areas of study include:

- Functions and their Graphs
- Polynomial and Rational Functions
- Topics and Applications of Trigonometry
- Vectors
- Linear Systems and Matrices
- Sequences, Series, and Probability
- Conic Sections, Parametric Equations, Polar Coordinates
- Limits and Intro to Calculus

<u>**Classroom Expectations:**</u> Students are expected to challenge themselves and strive to achieve maximum comprehension of Precalculus concepts. This is a relatively fast-paced course where effective and efficient use of class time is of critical importance. This classroom is designed to be a collaborative learning community where we strive to grow as individuals and as a collective unit. Respect, kindness, and encouragement is required of everyone. All Pioneer High School policies will be adhered to (for example, cell phones away during instruction, academic honesty upheld, appropriate use of language, etc.).

Grading Policy:

Classwork and Homework Assignments (Formative / 20% of quarter grade) will generally be assigned daily - also posted on Schoology - and it is expected that each assignment will be completed by the next class meeting so that questions concerning the exercises may be asked and answered. Time will often be allotted in class for students to begin homework - to work together and ask questions before departure. Late work will be accepted through the following Sunday after it is assigned, with a 20% late penalty assessed. Since solutions are often given in class and listed in the back of the textbook, completion includes documenting the process of how to solve a given problem. Assignment completion will be monitored and recorded via student upload to the Schoology platform. **If absent, it is the student's responsibility to consult Schoology and/or ask for missed work.*

Assessments (Summative / 80% of quarter grade) provide an opportunity for students to demonstrate mastery over several sections or an entire unit of study. Scores will be determined based on accuracy. Quizzes will generally be administered every 1-2 weeks. Chapter Tests will be administered whenever a unit of study has been thoroughly investigated. Students will be given at least a one-day notice before a quiz and multiple days' notice before a Test is administered.

Supplies:

- Textbook: *Precalculus with Limits: A Graphing Approach*. Larson, Hostetler & Edwards, 5th edition. (Students have also been provided a link to the online PDF version.)
- Graphing Calculator (TI-84 or equivalent. Book Depository may still have some for sign-out)
- Pencil
- Notebook/Folder to take notes, complete assignments, organize and retain paperwork
- AAPS-issued Chromebook or equivalent computing device

Extra Help: It is likely that this class may challenge you to change or modify your expectations and habits for learning mathematics. I will be available to help you during class and after school - all you have to do is ask! If this does not fit into your schedule, consider forming a study group to mull over problems that appear difficult. Most often, when great minds pull together, a solution is found! As class material becomes more complex, I also routinely record YouTube instructional videos as a supplement to the instruction provided in class. I may also offer after-hours, optional Zoom study sessions in advance of major assessments.

I strongly believe education is a partnership between parents, teachers, students, and administration. If there is anything more I can do to make this year successful, please do not hesitate to contact me any time. I am looking forward to an awesome year!

Sincerely,

Ryan Hansen

Mathematics Teacher Pioneer High School