**Algebra II**

Bigfork High School

**COURSE SYLLABUS**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Instructor:  | Josh Feller  | Term:  | 2019-20 |
| Office:  | 109 | Class Meeting Days:  | M-F |
| Phone:  | 837-7420 x4219 | Class Meeting Hours:  | See schedule |
| E-Mail:  | jfeller@bigfork.k12.mt.us | Class Location:  | 109 |
| Office Hours: | See schedule below or by appointment | Lab Location:  | N/A |
|  |  |  |  |

# Welcome

I am looking forward to introducing and teaching you the concepts of Algebra II, and helping you with applying these concepts to relevant real-world situations, which will be emphasized in this course. A majority of these concepts are expanded upon in Precalculus.

# My Schedule – 2016

7:40 am - 3:25 pm

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | **M** | **T** | **W** | **Th** | **F** |
| **1st** | ALG II | ALG II | ALG II | ALG II | ALG II |
| **2nd** | M115/S216 | M115/S216 | M115/S216 | M115/S216 | M115/S216 |
| **3rd** | ALG II | ALG II | ALG II | ALG II | ALG II |
| **4th** | ALG II | ALG II | ALG II | ALG II | ALG II |
| **5th** | NGA/M171 | NGA/M171 | NGA/M171 | NGA/M171 | NGA/M171 |
| **6th** | VHS | VHS | VHS | VHS | VHS |
| **7th** | PREP | PREP | PREP | PREP | PREP |

# Course Catalog Description

This course is designed to build on the study of linear, quadratic, and exponential functions. Students extend their repertoire of functions to include polynomial, radical, rational, logarithmic, and trigonometric functions in the Algebra 2 course. This course includes standards from the conceptual categories of Number and Quantity, Algebra, Functions, and Statistics and Probability. Some standards are repeated in other mathematics courses; therefore instructional notes indicate what is appropriate for study in this particular course. Standards that were limited in Algebra 1 no longer have those restrictions in Algebra 2. Students work closely with the expressions that define the functions, competently manipulate algebraic expressions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of exponents and logarithms.

# Course Learning Objectives

For the Algebra 2 course, instructional time should focus on these critical areas:

(1) expand understandings of functions and synthesize and generalize function properties to transform a variety of functions; extend their work with exponential functions to include solving exponential equations with logarithms; explore the effects of transformations on graphs of diverse functions, including functions arising in an application, in order to abstract the general principle that transformations on a graph always have the same effect regardless of the type of the underlying function

(2) extend the domain of trigonometric functions using the unit circle and model periodic phenomena with trigonometric functions; and

(3) relate data display and summary statistics to probability and explore a variety of data collection methods.

# Course Prerequisites

A grade of “C” or better in Algebra I & Geometry (can take concurrently with Math Department consent).

# Course Credits

0.5 Mathematic Credit per semester.

# Required Materials

**Writing Utensil:**

#2 pencil or Black or Blue pen for homework, quizzes, and exams.

**Notebooks:**

One spiral bound notebooks are required for homework/ixl calculations. Your name, class period and Algebra II should be clearly written on the front.

3-Ring Binder: You will need to keep your class notes in a 3-ring binder. All notes will be printed out for each student, and you will fill in the blanks and examples in class.

**Calculator:**

A graphing calculator is required for this class. The TI-83 Plus CE, TI-84 Plus, or TI-84 is recommended, but a TI-Inspire is acceptable. It is strongly recommended that each student purchase his or her own calculator for this course. Calculators are available to use in the classroom. Each student will be assigned a number and they are responsible for any damage that may occur during the school year.

**Miscellaneous:**

A clear ruler and colored pencils/pens are strongly encouraged but not required during the graphing portion of the course.

**Websites:**

Mr. Feller’s Website (has links to all the following): [bhsmathfeller.weebly.com](http://bhsmathfeller.weebly.com/)

Khan Academy: [www.khanacademy.org](http://www.khanacademy.org) Learn Zillion: [www.learnzillion.com](http://www.learnzillion.com)

Hippocampus: [www.hippocampus.org](http://www.hippocampus.org) Purple Math: [www.purplemath.com](http://www.purplemath.com)

Paul’s Online Notes: [tutorial.math.lamar.edu](file:///Volumes/GoogleDrive/My%20Drive/d.%20Syllabi/tutorial.math.lamar.edu)

Desmos Graphing Calculator: [www.desmos.com/calculator](http://www.desmos.com/calculator)

# Grades

**Grading System:**

|  |  |
| --- | --- |
|  | Weight of Grade |
| Quizzes (every Friday) | 25% |
| Exams (end of Chapter) | 50% |
| Final Exam (end of semester) | 10% |
| Homework/Classwork | 15% |

**Grading Scale:**

Per Bigfork High School Student Handbook:

|  |  |  |
| --- | --- | --- |
| 100-90 |  | A |
| 89-80 |  | B |
| 79-70 |  | C |
| 69-60 |  | D |
| 59 - 0 |  | F |

**Quizzes:**

Quizzes are every Friday. The only exception would be the Friday following a test. The purpose of these quizzes is to demonstrate your understanding and application of the current concepts presented during that week. Graded quizzes will be handed back the following Monday. Class will resume as scheduled following the completion of the quiz for the day. Students will be given the class period to complete the quiz. Notes will not be allowed during the quiz.

To receive full credit for each problem on the quiz, you must follow directions carefully, use the correct procedures, and show all work - including calculator functions. Partial credit may be given for incorrect answers if all of your work is shown.

 To receive full credit, final answers for each question must be clearly identified with either a box or circle. If more than one final answer is identified per question, no credit will be awarded for that particular question. Test dates will be displayed on the board during each quarter.

**Tests:**

At the end of each chapter, there will be an exam. The exams will be closed notes. You will be given a 8 ½ by 11-inch note sheet to use on the test. The note sheet will be turned in with the test, completed or not. The graded test will be handed back within 48 hours. Note sheet can contain concepts, rules, formulas. **The note sheet cannot contain any completed problems.** If your note sheet contains completed problems, you will have to re-take the test after school. Note sheets will be returned the day before the Final Exam.

To receive full credit for each problem on the test, you must follow directions carefully, use the correct procedures, and show all work - including calculator functions. Partial credit may be given for incorrect answers if all of your work is shown.

 To receive full credit, final answers for each question must be clearly identified with either a box or circle. If more than one final answer is identified per question, no credit will be awarded for that particular question. Test dates will be displayed on the board during each quarter.

**Comprehensive Final (per semester):**

The semester final will be comprehensive and will be administered at the scheduled finals time, determined by Bigfork High School.

The final exam will be closed book/closed notes. To the final exam, you will be permitted to bring:

1. The 8 ½ by 11 inch note sheets for each of the prior four (4) tests.

The graded final will not be returned.

To receive full credit for each problem on the final, you must follow directions carefully, use the correct procedures, and show all work - including calculator functions. Partial credit may be given for incorrect answers if all of your work is shown. To receive full credit, final answers for each question must be clearly identified with either a box or circle. If more than one final answer is identified per question, no credit will be awarded for that particular question.

**Homework:**

Homework is practice in mathematics class. The work will be tracked to determine if you are completing the assignment correctly. If a student is not completing assignments or making an honest attempt to complete assignments, a conference will be set up with the parents and the student to discuss strategies to improve work. All work will be turned in on Friday, before the quiz. Homework is practice and will be graded with the intent of checking whether the student understands the concepts.

IXL practice will be given to students who need to review a concept they do not understand. They will be required to complete these sections before they are able to complete a test or quiz re-take.

# Course Policies: Grades

**Quiz/Test Retakes:**

Students will be allowed to take retakes on concepts that they missed on test and quizzes. In order to be eligible for a retake, students must complete additional work on either IXL or other practice problems to demonstrate that they have practiced the concepts to a level that is satisfactory for them to demonstrate mastery on the retake. Students will only have to completed the concepts that they did not perform well on. Concepts that show mastery do not need to be retested/requizzed.

All students are eligible to retake test and quizzes, but students who score a D or F will be required to complete a retake.

**Absent/Late Work Policy**:

Students will miss class from time to time, but it is the responsibility of that student to find what work and notes were done while they were away. All students will be required to email me the day of their absence as a way to check in. All assignments and study guides are posted on the website, [bhsmathfeller.weebly.com](http://www.bhsmathfeller.weebly.com) . There are two types of absences:

School-Related Make-up Policy: (SR)

If you miss school due to a school-related absence, work that was missed that day or days is expected to completed and turned in the day you return from the absence.

Non-School-Related Make-Up Policy: (EA, UV, PA, UA, TR, OS, IS)

The student will be expected to make-up the work in an appropriate amount of time. If necessary, students will be placed in after-school study backs until the work is completed. The student will have one day per day absent to make-up the work. This does not mean if a student was gone for 5 days that they have 5 extra days when you return to complete the make-up work. Note that sometimes it is detrimental to the student’s progress if they drag out the length of time in making up the work. All classwork and sections of study are posted on the website, and it is the student’s responsibility to check the website, [bhsmathfeller.weebly.com](http://www.bhsmathfeller.weebly.com), to gather all work for their absences.

Pre-Arranged Absence: All Pre-Arranged Absences must be completed 3 days before the student is gone. Each student is required to complete the assignments by the time they return to school when working with a Pre-Arranged Absence. Check the website for additional help or videos to work through the content during this type of absence.

Test/Quiz Absence:

If you are absent on the day of a quiz or test, you are expected to take the test or quiz the day you return. Quizzes or tests can be completed before or after school if set up as an appointment with the teacher.

**10-Absence Policy:**

Any student who is absent from class for ten (10) or more class periods during each semester will be subject to the following:

10+ Absences: for each absence after 10, the student will receive a 0 on that day’s work. This includes, Classwork, Attendance Point, Quizzes and Tests.

The following absences count toward the student’s ten (10): EA, UV, PA, UA, TR, OS, IS

School Related absences do not count toward the student’s ten (10).

Circumstances beyond the student’s control will be considered, and exceptions to this policy apply. This is determined on a case-by-case basis.

**Extra Credit Policy**:

There is no extra credit available in this course. The goal is to understand and learn the concepts of Algebra II, not to earn a certain number of points. If a student is working hard, asking questions, and actively trying to learn the material, then extra credit isn’t required to pass this course.

**Grades of "Incomplete"**:

The current college policy concerning incomplete grades will be followed in this course. Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course and the remaining work can be completed the next semester. Incomplete work must be finished by the end of the subsequent semester or the “I” will automatically be recorded as an “F” on your transcript.

**Loss of Credit Policy:**

Bigfork High School has two (2) requirements to earn credit in a course which will begin with the first scheduled day:

1. The student must have a 60% average or better to receive credit in classes taken, and
2. The student must make a sincere effort to attend classes regularly.

While a student will earn credit with a 60%, that student will not be approved to advance to the next mathematics course. Any final grade below a 70% will result in that student repeating that mathematics course.

Regarding “a sincere effort” to attend classes regularly. Absences will occur (See 10 Absence Policy), but students will lose semester credit if they miss more than 25% of the scheduled class periods.

# Course Policies: Student Expectations

**Attendance Policy**:

Regular attendance is essential to your success in this class. You are expected to attend all class sessions. If you are absent, it is your responsibility to learn the missed material and to complete any missing sections of your Class Notes notebook prior to the next exam. Class starts promptly when the bell rings, and it is expected that all students are ready to start when it rings. Please note that our Attendance Policy requires the student to make a sincere effort to attend class regularly to earn credit.

**Tardy Policy**:

It is the student’s responsibility to be on time for class. After the 10-minute mark, a student is considered absent. Parents will be notified at each of the discipline levels, and will be included on the plan for improvement for students who are receiving excessive tardies. Consequences for excessive tardies are as follows:

 **3 – 6 tardies** = after-school detention

 **7 tardies and beyond** = office referral, in-school suspension per tardy (per

 Tardy Policy found on page 18 in the student handbook).

\*Please note that if a student is not prepared for class, they will be issued a tardy for each occurrence they do not bring necessary materials for class.

**Professionalism Policy**:

All electronic devices including laptops, mobile phones, iPods, *etc*. **must be turned off and put away** during all classroom activities unless permission is granted before class due to special circumstances. You will not be able to use your phone at any time during the class period. Behavior that disrupts the learning environment will not be tolerated. Please arrive on time for all class meetings. Bathroom breaks will not be allowed.

Refer to the Personal Electronic Communication Devices section of the Student Handbook if you have additional questions.

**Academic Conduct Policy**:

Please refer to Bigfork High School Student Handbook, for all district/school policies regarding Academic Conduct. If a student plagiarizes, cheats, or acts in an academically dishonest way on an assignment, project, or test, the student will receive a zero for the assignment. A second offense will result in the student receiving a zero for the assignment, discipline meeting with teacher/principal/student, which could result in an ‘F’ for the quarter and/or removal from class. However, collaboration on homework assignments is allowed and encouraged. If you have any additional questions regarding cheating and plagiarism, please refer to the Student Handbook.

**Potential Keys to Success:**

1. Attend class and participate
2. Do your homework.
3. Organize and spend effort on your notebooks.
4. Reflect on the most important topics of each lecture by re-reading your notes

**Additional Comments:**

Please keep this syllabus, as it is your only one for the class. All of the information in this syllabus is subject to change. Changes will be given verbally during regular class time. You are responsible for understanding and recording these changes even if you are not present in class at the time they are announced.

Students are responsible for reading, understanding, and abiding by all of the district/school rules and expectations described in the current Bigfork High School student handbook.

Make the best of the class. Be involved, participate, help others, and ask questions. Be responsible for you own education and make the most of it.

**Contact:**

If there are any questions or concerns about this policy, feel free to contact me. Email is the best way to contact me, as I can check it anywhere and anytime.

I feel that parents are a key in making homework a positive experience for each student. It follows, that I ask that each parent make homework a top priority, provide the necessary supplies/materials and a quiet environment, and most importantly provide praise and support. It is your child's best interest that we work together with regards to his or her schooling. I will keep you informed about your child's progress in my class and I expect you to contact me if you notice any and all problems.

**Mr. Feller**

**jfeller@bigfork.k12.mt.us**

**jfeller@bfsd38.org**

**bhsmathfeller.weebly.com**

**ALGEBRA II COURSE SYLLABUS ACKNOWLEDGEMENT**

**Keep the syllabus, but return this form.**

**Thank you for taking the time to read the course syllabus. Thank you in advance for your support this year. Please do not hesitate to contact me if you have questions. I am really looking forward to a successful school year.**

**I have read the guidelines and policies of Mr. Feller’s class. I understand the rules and guidelines and agree to follow them on a daily basis.**

**Student Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parent/Guardian Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Write the easiest way for me to contact you.**

**Parent email \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parent cell phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**I have read the guidelines and policies of Mr. Feller’s class. I understand the rules and guidelines and agree to follow them on a daily basis.**

**Please read and return this form by Friday, September 6th.**