



# BARNEGAT TOWNSHIP SCHOOL DISTRICT

## Barnegat High School Bridge to Advanced Algebra Syllabus

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### Course Information

Bridge to Advanced Algebra  
Full Year  
Room C-108

### Teacher Information

Name(s): Lauren Reick and Keith Stokes  
Phone: (609) 660-7510 ext. 18218  
Email: [LReick@barnegatschools.com](mailto:LReick@barnegatschools.com) and  
[kstokes@barnegatschools.com](mailto:kstokes@barnegatschools.com)

Teacher Website: [Mrs. Reick & Mr. Stokes](#)

### Course Description:

Bridge to Advanced Algebra was developed with the intent to provide students who have completed Algebra I and Geometry with the additional math foundation they need to be successful in the New Jersey Student Learning Standards for Mathematics Algebra II course. Each student's learning expectation for Bridge to Advanced Algebra is intended to:

- reinforce linear concepts that were previously included in the Algebra I Course
- master quadratics and exponential concepts through modeling functions and summarizing, representing, and interpreting data
- introduce higher order concepts to prepare students for success in NJSLS Algebra II.

Students will apply concepts from first year Algebra and Geometry to solve real-world problems. Students will be helped to visualize, represent, model and solve these problems real people encounter in their jobs and lives in areas such as science, art and business. The focus will be on the modeling of linear and quadratic functions. Technology will play a major role in developing student understanding of these concepts.

### Course Competencies/ Learning Objectives

Students who successfully complete Bridge to Advanced Algebra will be competent in the following areas:

- Students will be able to use multiple representations to model real-world situations.
- Students will be able to interpret the slope of a line as a rate of change.
- Students will be able to solve multi step equations and inequalities in one variable.
- Students will be able to rearrange formulas to highlight a quantity of interest.
- Students will be able to explain volume formulas and use them to solve problems.
- Students will be able to prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).
- Students will be able to understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range.
- Students will be able to use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
- Students will be able to solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

- Students will be able to construct and compare linear, quadratic, and exponential models and solve problems.

**Course Texts / Online Resources**

Textbook: Modeling with Mathematics: A Bridge to Algebra II

Authors: Nancy Crisler & Gary Simundza

Edition: 2nd

Year of Publication: 2012

**Required Materials**

- Chromebook
- Chromebook charger
- Pencil
- Notebook

**Attendance Policy**

Regular and prompt class attendance is an essential part of the educational experience. The Barnegat Township School District expects students to be responsible and exercise good judgment regarding attendance and absences. Students accept full responsibility for ensuring that they complete any/all work missed due to absences.

**Course Topic Outline**

Please find a list of the units for this course:

<b>Content Area: Mathematics</b>	
<b>Course Title: Bridge to Advanced Algebra</b>	<b>Grade Level: 11</b>
Unit 1: Mathematical Modeling	5 Days
Unit 2: Direct Variation	10 Days
Unit 3: Solving Equations and Inequalities	10 Days
Unit 4: Measurement - Perimeter, Area, and Volume	10 Days
Unit 5: Functions and Their Relationships	15 Days
Unit 6: Systems of Equations and Inequalities	10 Days
Unit 7: Describing Data	10 Days
Unit 8: Exponential Functions	10 Days
Unit 9: Quadratic Functions	10 Days

**Student Grades**

The grading system for this course is based on the category weights listed in each department's policy. For this course, those weights are listed below. Each marking period, students will have a minimum of three (3) Major Assessments and seven (7) Minor Assessments (explained below). Course Participation is assessed twice (2x) per marking period using the district rubric.

<b>Major Assessments</b>	50% of marking period grade
<b>Minor Assessments</b>	30% of marking period grade
<b>Course Participation</b>	15% of marking period grade
<b>Benchmark Assessments</b>	5% of marking period grade

Please note: the above areas are used as the basis for 80% of your grade for the course; the midterm and/or final exam will constitute the remaining 20% of your grade.

- Examples of Major Assessments include items that are summative in nature, such as: tests, projects, research papers, prose-constructed response timed writings, formal presentations, reports, Socratic seminars, or any other type of assessment used to capture evidence of learning at the culmination of a unit of study.
- Examples of Minor Assessments include items that are formative in nature, such as: quizzes, reading comprehension checks, response journals, exit tickets, small-scale research activities, reading logs, in class worksheets, or any other type of assessment that is diagnostic in nature and used to guide instruction and provide ongoing feedback to students.
- Note: grades for individual assignments are entered into Genesis for the marking period in which the assignment is collected, and not a subsequent marking period.
- Extra Credit will only be available for assignments that have been approved ahead of time by the teacher and department supervisor.
- In this course, it is expected that students will submit only their best work, and teachers reserve the right not to accept work that is substantially below what a student is capable of producing.
- *Please speak to your teacher about the opportunity for earned Second Chances on certain Major Assessments.*

## Course Participation Rubric

	Academic Social Skills	Readiness to Learn / Study Skills	Online Discussions	Classwork	21st Century College and Career Readiness
Meeting Expectations	<p><b>20 points</b></p> <ul style="list-style-type: none"> <li>- Takes initiative in completing tasks in the online classroom.</li> <li>- Communicates needs to the teacher in an appropriate manner.</li> <li>- A role model for others in the online classroom.</li> <li>- Appropriately seeks support and/or assistance from the teacher.</li> </ul>	<p><b>20 points</b></p> <ul style="list-style-type: none"> <li>- Produces notes and other materials that demonstrate effort and insight.</li> <li>- Is motivated and takes ownership of his/her learning.</li> <li>- Takes steps to better himself/herself through Google Meets, emailing, etc.</li> </ul>	<p><b>20 points</b></p> <ul style="list-style-type: none"> <li>- Consistently completes the assigned discussion questions and rarely misses a question, if at all.</li> <li>- Responses consistently reflect high levels of care and pride in work.</li> <li>- Replies and interacts with peers in a meaningful manner.</li> </ul>	<p><b>20 points</b></p> <ul style="list-style-type: none"> <li>- Consistently completes assigned tasks in a timely manner.</li> <li>- Actively participates in classroom activities on a daily basis.</li> <li>- Contributes to class discussions in a meaningful way (asking questions or adding to class discussion).</li> </ul>	<p><b>20 points</b></p> <p><b>Student <u>consistently</u> shows the following:</b></p> <ul style="list-style-type: none"> <li>- Responsible and contributes to our online community.</li> <li>- Clearly and appropriately communicates with the teacher via email.</li> <li>- Understands the consequences of actions.</li> <li>- Responsibly uses technology.</li> </ul>
Approaching Expectations	<p><b>15 Points</b></p> <ul style="list-style-type: none"> <li>- Completes tasks in the online classroom.</li> <li>- Sometimes communicates needs to the teacher.</li> <li>- Frequently on-task, but may need some redirection from the teacher.</li> </ul>	<p><b>15 Points</b></p> <ul style="list-style-type: none"> <li>- Often produces notes and other materials that demonstrate effort, but may also require direction.</li> <li>- Is mostly motivated and takes ownership of his/her learning.</li> <li>- Often takes steps to better himself/herself through Google Meets, emailing, etc.</li> </ul>	<p><b>15 Points</b></p> <ul style="list-style-type: none"> <li>- Frequently completes the assigned discussion questions, but may have missed a few.</li> <li>- Responses sometimes reflect high levels of care and pride in work, but not always.</li> <li>- Replies and interacts with peers.</li> </ul>	<p><b>15 Points</b></p> <ul style="list-style-type: none"> <li>- Usually completes assigned classwork tasks.</li> <li>- Frequently participates in classroom activities but sometimes requires re-direction.</li> <li>- Usually contributes by responding, and/or asking questions.</li> </ul>	<p><b>15 Points</b></p> <p><b>Student <u>frequently</u> demonstrates the following:</b></p> <ul style="list-style-type: none"> <li>- Responsible and contributes to our online community.</li> <li>- Clearly and appropriately communicates with the teacher via email.</li> <li>- Understands the consequences of actions.</li> <li>- Responsibly uses technology.</li> </ul>

<b>Not Meeting Expectations</b>	<b>10 Points</b> <ul style="list-style-type: none"> <li>- Rarely completes tasks in the online classroom.</li> <li>- Does not communicate needs to the teacher.</li> <li>- Frequently needs re-direction from the teacher.</li> </ul>	<b>10 Points</b> <ul style="list-style-type: none"> <li>- Produces notes and other materials that lack effort to learn.</li> <li>- Unmotivated and does not take ownership of his/her learning.</li> <li>- Does not take appropriate steps to better himself/herself.</li> </ul>	<b>10 Points</b> <ul style="list-style-type: none"> <li>- Rarely completes the assigned discussion questions.</li> <li>- Responses do not reflect care and pride in work.</li> <li>- Little to no replies and interactions with peers.</li> </ul>	<b>10 Points</b> <ul style="list-style-type: none"> <li>- Rarely completes assigned tasks and does not produce his/her best work.</li> <li>- Usually does not participate in classroom activities and often requires teacher re-direction</li> <li>- Usually does not contribute by responding and/or asking questions.</li> </ul>	<b>10 Points</b> <b>Student rarely demonstrates the following:</b> <ul style="list-style-type: none"> <li>- Responsible and contributes to our online community.</li> <li>- Clearly and appropriately communicates with the teacher via email.</li> <li>- Understands the consequences of actions.</li> <li>- Responsibly uses technology.</li> </ul>
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**Plagiarism, Cheating, and Academic Integrity**

The Barnegat Township School District places a strong emphasis on students’ integrity, and the district will not tolerate instances of academic dishonesty. Plagiarism is the practice of copying words, sentences, images, or ideas for use in written or oral assessments without giving proper credit to the source. Cheating is defined as the giving or receiving of illegal help on anything that has been determined by the teacher to be an individual effort. Both are considered serious offenses and are subject to consequences described in the Student Handbook and Board Policy #5701.

**Honor Code**

The purpose of this Honor Code is to communicate the meaning and importance of academic integrity to all members of the school community and to articulate and support the interest of the community in maintaining the highest standards of conduct in student learning. Barnegat High School embodies a spirit of mutual trust and intellectual honesty that is central to the very nature of learning, and represents the highest possible expression of shared values among the members of the school community. The core values underlying and reflected in the Honor Code are:

**Academic honesty** is demonstrated by students when the ideas and the writing of others are properly cited; *students submit their own work for tests and assignments without unauthorized assistance; students do not provide unauthorized assistance to others; and students report their research or accomplishments accurately.*

**Respect** for others and the learning process to demonstrate academic honesty.

**Trust** in others to act with academic honesty as a positive community-building force in the school,

**Responsibility** is recognized by all to demonstrate their best effort to prepare and complete academic tasks.

**Fairness and equity** are demonstrated so that every student can experience an academic environment that is free from the injustices caused by any form of intellectual dishonesty.

**Integrity** of all members of the school community as demonstrated by a commitment to academic honesty and support of our quest for authentic learning.

This Honor Code summarizes the Honor Policy, which defines the expected standards of conduct in academic affairs. The student body and faculty at Barnegat High School will not tolerate any violation of the Honor Code.

Any violation of the Honor Code will result in Administrative Consequences and be detrimental to student grade.

**Classroom Expectations** (A more detailed list of rules and procedures will be explained and provided in class)

1. All school rules and policies apply to this class.
2. Students are expected to wear their masks in school.
3. Bring your chromebook to class CHARGED and with your charger.
4. Students will complete all assignments by the deadlines.
5. Students will come to class on time, prepared, and ready to learn.
6. The teacher and students will work together for a respectful, safe classroom.
7. Students will actively participate in class discussions and other activities in order to enhance their learning experiences.
8. Cell phones are prohibited during class unless approved by the teacher ahead of time.

#### **Extra Help and Support**

Occasionally, students will require additional help to master the content and skills in this course. If you need additional help, there are a variety of options for you, including:

- During your lunch or Den period
- Before/after school help sessions through Google Meet
- Free online tutoring with Brainfuse (available from the Barnegat Library website)

As your teacher, I am committed to your success. If you need help, please ask!

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**\*Instead of submitting a hard copy, please submit the Google Form stating you have read and understand the syllabus for Bridge to Advanced Algebra.**

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Student Signature

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Print Name

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Parent/Guardian Signature

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Print Name