

**Roanoke Valley Governor's School for Science and Technology**  
**RVGS Pre-calculus**  
**Syllabus 2018-2019**

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**I. Course Information**

**a. Course Description**

RVGS Pre-calculus is designed to prepare the student for AP Calculus. The major themes include functional analysis (polynomial and rational functions, exponential functions, logarithmic functions, trigonometric functions, polar functions, and parametric functions), conic sections, systems of equations and inequalities, matrices, sequences and series, continuity and limits, and mathematical modeling.

**b. Gifted education strategies**

1. **Understand the connections** between various mathematical representations: graphical, numerical, analytical, and verbal.
2. **Communicate** mathematics both orally and in well-written sentences including being able to explain solution to problems.
3. Use **technology** to help solve problems, experiment, interpret results, and verify conjectures.
4. Determine the **reasonableness** of solutions, including sign, size, relative accuracy, and units of measurement.

**c. Text, Printed Resources, and Media Resources**

Sullivan, S. & Sullivan, M. (2017). *Precalculus: Enhanced with Graphing Utilities*. New York, NY: Pearson.

**II. Grading Policy**

**a. Grading Scale**

100-90%	<b>A</b>
89-80%	<b>B</b>
79-70%	<b>C</b>
69-60%	<b>D</b>
59-0%	<b>F</b>

**b. Types of Evaluations**

- i. **Tests:** Tests are administered after several integrated competencies have been mastered. These tests are designed to help the students learn to think about the broad connections between topics.

- ii. **Quizzes:** Quizzes will be given to assess understanding and application of connections between objectives. A list of competencies and enabling objectives that you are expected to master in this course is posted to the course web page and course Moodle page online.
  
- iii. **Labs/Coop. Learning Activities/Projects:** A lab is a problem or set of exercises designed to make use of current technology and/or ideologies requiring the use of higher order thinking skills. It may require a written lab report. Labs are designed to be completed independently or in groups based upon instructions. These labs may involve mathematical modeling, data collecting, statistical analysis, and the use of computer software and/or graphing calculators. Often, projects assigned will enhance your understanding of the integration of mathematics into other disciplines. Since many lab and project assignments will require you to work in a cooperative learning environment, your participation or lack thereof directly affects your learning experience as well as the other members of your group. Students are expected to follow the description in the Student Handbook for working in cooperative learning groups. Cooperative learning and group assignments are based on the honor of the group as well as the honor of the individual. By signing your name to a group assignment, you are attesting that everyone in your group has served productively toward the completion of the assignment. Each student is responsible for the content and concepts studied in the lab and must be prepared to present or discuss any part of the lab. Cooperative learning and group assignments are expected to be treated as such. Each member of a group is expected to contribute productively within that group. Assigning each person in the group a certain number of questions, problems, or activities, then compiling those activities to turn in is unacceptable and will result in zero credit.
  
- iv. **Homework:** Homework is an integral part of this course. It is extremely important that its completion is on time modeling the methods presented in class. It is expected that you check answers in the back of the book before coming to class and make note of specific questions/problems you would like to review. Homework will be checked on a regular basis by various methods including, but not limited to, asking you to exhibit proof that you worked on the assignment, asking you to write down your solution and work on an assigned problem and turning it in, or asking you to take a quiz on previously completed homework assignments, etc.
  
- v. **Semester Exam:** At the end of each semester, a comprehensive exam is given on scheduled Exam Days. These exams will cover **all** material covered during the semester.

**c. Semester Grade Determination**

Category	Weight
Tests	40%
Quizzes	20%
Labs/Coop. Learning Activities/Projects	15%
Homework	10%
Semester Exam	15%

**d. Final Grade Determination**

The year-end final grade for the course is the average of the two semester grades. Students who fail to maintain an average of 80% or above are subject to the RVGS probationary policy.

**III. Class Policies and Procedures**

**a. Absences and Tardies:** The policy in the RVGS student handbook will be followed. Absences without any parent note or contact will be consider skipping. Credit is not given for any work on days considered as skipping.

\* If a student misses three or more CONSECUTIVE days, they must demonstrate evidence that the absence is due to medical, legal, or school-related reasons (doctor note, court record, or school contact). Otherwise, the absence is considered unexcused and the student loses 10% from class assignments during the absence.

**b. Make-up Work:** Any assignment missed due to any type of **excused** absence may be made up. You will not be allowed to make up work without a note. It is up to the student to check the course web page or Moodle to find out about missed work and then approach the teacher to arrange a suitable time for makeup work. If you know you are going to be absent, you are responsible for getting the assignments ahead of time and submit them the day you return. If you are absent the day prior to an assessment of any kind (i.e. quiz, test, exam), **including review days**, you will be expected to take the assessment on the scheduled day.

**c. Late-work Policy:** Late assignments (with the exception of homework which is not accepted late) will lose 10% credit for each day late and no assignments will be accepted more than **four days** late, at which point you will receive a zero. Group assignments are to be submitted on the due date regardless of whether all group members are present on the due date. Each day you are at Governor’s School counts as one day, even if you do not have Pre-calculus class that day.

- d. Cheating and Plagiarism:** The policy in the RCPS student code of conduct will be followed.
- e. Technology Policy:** The RCPS Acceptable Use Policy and the RVGS student handbook policy will be followed.
- f. Cell Phone Policy:** The policy in the RVGS student handbook for cell phones and electronics will be followed. If parents need to contact a student during class, they should call the front office.
- g. Extra Help:** It is inevitable that there will be times when you may not grasp a concept the first time. Extra help is always available, but it is up to you to seek help as soon as possible. The following options are available to you, but you should make arrangements with your teacher to make sure that he or she is available at a given time:
  - 1. Before School
  - 2. After School
  - 3. Other Arrangements
  - 4. E-mail: Emails received during the scheduled school day will be answered in a timely fashion; emails received outside of the scheduled school day will be answered at the teacher's earliest convenience.
- a. Parent Vue:** Grades are available through Parent Vue. The system is new for the 2018-2019 school year. For assistance with accessing your grades, please contact the school's guidance counselor. If you have questions regarding a particular grade entry, please let your teacher know as soon as possible.

When viewing your grades, understand that:

- i.** A blank in the grade book means that the assignment has not yet been graded. Teachers will have all assignments graded within 5 school days of the due date (with the exception of very long assignments which will be graded within 10 school days). You may have a blank because the teacher has not graded the class set or because your assignment was turned in after the due date. Blanks do not count as zeros in your average.
- ii.** A zero in the grade book means that you have earned a zero on the assignment. Cases in which this might occur include submitting incorrect answers to an assignment, submitting an assignment past the due date, or failure to submit an assignment.
- iii.** An excused (EX) in the grade book means that you are excused from the assignment without penalty.

- b. Interim Reports:** A hard-copy of your current grade will be given to you to take home three times during each semester (see dates on the school calendar). The interim report is a snapshot of the current class average of your performance. Please feel free to discuss your report with your teacher.
- c. Student Performance Strategy:** Interventions and Academic Improvement Plans will be implemented at the teacher's discretion or in the event that the student's grade falls below an 80.
- d. General classroom procedures**
- i.** Bring your calculator to class **every day** although we may not use it every day. Always keep your calculator in excellent working condition. Do not expect your teacher to provide you with a calculator if you do not bring yours or have not kept your batteries in good working order. Not having a calculator means that you are not prepared for class and consequences for unpreparedness will be at the discretion of the teacher.
  - ii.** Please take care of sharpening your pencil, using the restroom, buying snacks, and getting drinks prior to the beginning of class. None of these are acceptable reasons for being late to class. Neither is it acceptable to come to class, check in, and then leave to go to the snack or drink machines.
  - iii.** Please respect the teacher and the other members of the class and do not interrupt class to use the restroom; instead, wait until the lesson is over or a good stopping point is reached, then you may leave to go to the restroom.
  - iv.** All work completed in class for individual evaluation will be based on the premise that you have neither given nor received help. When you sign your name on the paper, you are agreeing to this premise.
  - v.** Please do not wait until the day an assignment is due to ask questions about it. Ask questions and get help and clarifications ahead of time.
  - vi.** The rules of common courtesy will be observed in the classroom at all times. When the teacher is speaking, students should be attentive and listening. Likewise, if one of your fellow students is speaking, you should provide them with the same courtesy and respect that you expect to receive. There is plenty of time to talk during the course of the day—make sure you choose appropriate times to do so!
  - vii.** Being on time and using available time to the fullest are important skills. Students are expected to meet all deadlines and make proper use of class time. Furthermore, students are expected to arrive on time to class and be prepared to begin class when the tone sounds. Students are expected to not disrupt or to cause issues that take away from the quality of the class.