**Roanoke Valley Governor’s School for Science and Technology**
**RVGS Pre-calculus**
**Syllabus 2023-2024**

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1. **Course Information**
	1. **Course Description**

RVGS Pre-calculus by design is 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 mathematical modeling.

* 1. **Gifted education strategies**
	2. **Understand the connections** between various mathematical representations: graphical, numerical, analytical, and verbal.
	3. **Communicate** mathematics both orally and in well-written sentences that explain and model concepts, processes, methods, and solution(s) to problems.
	4. Use **technology** to help solve problems, experiment, interpret results, and verify conjectures.
	5. Determine the **reasonableness** of solutions, including sign, size, relative accuracy, and units of measurement.
	6. **Text, Printed Resources, and Media Resources**

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

1. **Grading Policy**
	1. **Grading Scale**

100-90% **A**

 89-80% **B**

 79-70% **C**

 69-60% **D**

 59-0% **F**

* 1. **Types of Evaluations**
		1. **Tests:** Tests are administered after several integrated competencies have been mastered. These assessments are intended to help the students learn to think about the broad connections between topics.
		2. **Quizzes:** Quizzes are 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 assessable online through the course web pages.
		3. **Labs/Cooperative 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 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. Projects assigned are intended to 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.
		4. **Homework and classwork:** Homework is an integral part of this course and will be checked regularly for completeness. All assignments are due at the beginning of class. If a student is absent, it is due upon the student’s return. Homework may be submitted one day late for half credit. After one day, it will not be accepted. 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.
		5. **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.
	2. **Semester Grade Determination**

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

* 1. **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.

1. **Class Policies and Procedures**
	1. **Absences and Tardies:** The policy in the RVGS student handbook will be followed. Absences without any parent note or contact will be consider skipping. No credit for any work on days considered as skipping.
	2. **Make-up Work:** Any assignment missed due to any type of **excused** absence may be made up. It is up to the student to check Canvas 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. Reasonable flexibility will be exercised when warranted given there was **prior contact from the student.**
	3. **Late-work Policy:** Late assignments (apart from homework which is not accepted more than 1 day late) will lose 10% credit for each day late and no assignments will be accepted more than **four days** late, at which a zero will be assigned. 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.
	4. **Cheating and Plagiarism:** The policy in the RVGS student handbook will be followed.
	5. **Technology Policy:** The RCPS Acceptable Use Policy and the RVGS student handbook policy will be followed.
	6. **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.
	7. **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 plan with your teacher to make sure that she is available at a given time:
2. Before School
3. After School
4. Other Arrangements
5. 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.
	1. **Parent Vue:** Grades are available through Parent Vue. 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.
	2. **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.
	3. **Student Performance Strategy:** Interventions and Academic Improvement Plans will be implemented at the teacher’s discretion or if the student's grade falls below 80%.
	4. **General classroom procedures:**
		1. Bring your calculator to class **every day.**
		2. 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.
		3. 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.
		4. 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. Arrive on time to class and be prepared to work when class begins.
		5. Leave class every day knowing that you did your best.
		6. **SEC Notification:**Per Virginia Code (§ 22.1-16.8), parents must be aware of the use of any instructional materials with explicit content.  No explicit materials are used in this course.