**Roanoke Valley Governor’s School for Science and Technology**  
**RVGS Biology**  
**Syllabus 2022-2023**

**Cindy Bohland Steve Villers**[**cbohland@rvgs.k12.va.us**](mailto:cbohland@rvgs.k12.va.us)[**svillers@rvgs.k12.va.us**](mailto:svillers@rvgs.k12.va.us)

**Course Information**

* 1. **Course Description**

RVGS Biology is an in-depth, accelerated course that emphasizes an inquiry-based approach to the study of living organisms. This course is equivalent to an introductory college course for science majors. The major themes include evolution and the unity and diversity of life; principles of cell and molecular biology with an emphasis on DNA technology; Mendelian genetics; ecology; and energy flow in the cell, organism, and ecosystem. Virginia biology standards of learning are covered during the course. (Dual enrollment course with Virginia Western Community College)

* 1. **Gifted education strategies**

Inquiry-based learning and interactions with professional scientists are integral parts of the course. Considerable emphasis is placed on research and experimental design including use of primary sources, use of technology, experimental approaches to problem solving, and statistical treatment and evaluation of data.

* 1. **Text, Printed Resources, and Media Resources**
     1. Urry. L.A., Cain, M.L., Wasserman S. A., Minorsky, P.V., Jackson R.B., Reece, J.B. (2014). *Campbell Biology in Focus, AP Edition, 1st edition.* Boston: Pearson.
     2. Urry et al (2029) *Campbell Biology in Focus, AP Edition, 3rd edition,* ***e-text.***
     3. Mastering Biology (<http://www.masteringbiology.com/>)

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:** Assessment will cover multiple chapters and will evaluate competency attainment. Daily active studying is necessary in order to master the level of understanding needed for these assessments.
     2. **Quizzes:** Frequent scheduled quizzes will cover single topics or chapters and will evaluate competency attainment. Daily active studying is necessary in order to be prepared for quizzes. In the calculation of the overall grade, the lowest quiz grade will be dropped.
     3. **Homework:** Students are expected to actively study the material daily. Mastering Biology assignments will accompany each chapter or major topic and will typically be due the day before a quiz. Students should use their texts, Mastering Biology tutorials, and their notes to complete the Mastering Biology assignments.
     4. **Labs:** Dialog with the teacher and lab group members will help the student make connections between the labs and course competencies. Mastery of lab content and skills may be assessed through group work, individual work, or a combination of both. Assessment types will include informal questioning, written reports, lab quizzes, and test questions. Students are expected to follow all safety rules when working in the lab. Failure to abide to safety rules will result in removal from the lab and a grade of zero.
     5. **Projects:** Students will work individually or in small cooperative groups. Students will use higher-order thinking skills to examine critical issues in biology and connect them to topics of study. Group projects will be evaluated based on group work and individual work.
     6. **Exam**. A cumulative exam will be given at the end of the semester.
  2. **Semester Grade Determination**

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| --- | --- |
| **Category** | **Weight** |
| Tests | 30% |
| Quizzes | 25% |
| Labs/Projects | 25% |
| Homework | 10% |
| Semester Exam | 10% |

* 1. **Final Grade Determination**

The final grade is the average of the 2 semester grades. Students who fail to maintain a B average or above will be subject to the RVGS re-evaluation procedure.

1. **Class Procedures**
   1. **Absences and tardies:** The policy in the RVGS student handbook will be followed.
   2. **Make-up Work:** 
      1. Roanoke City Public Schools policies for excused and unexcused absences will be followed.
      2. A written note provided by a parent or guardian is required any time a student is absent. Students are responsible for making up all missed work. Notes must be received within 5 days of the absence to avoid receiving a zero for missed work.
      3. All pre-planned absences of three or more days must be discussed directly with the director. A written note must be provided a week prior to the absence, and arrangements to make up work should be made with the teacher.
      4. A10% grade penalty will be imposed on make up work due to unexcused absences of three days or longer.
   3. **Late-work:** 
      1. For Mastering Biology assignments, a 10% per day (including weekends) grade deduction will apply to late assignments, with a maximum deduction of 50% if the Mastering Biology is completed before the unit test. After the unit test, no credit will be given for late work.
      2. For assignments (homework, labs, projects), a 25% penalty will be applied for each day late.
      3. **When substantial time is given in class for work on an assignment, no assignments will be accepted late.**
      4. If you have a legitimate reason for needing more time on an assignment, you must pro-actively communicate with your teacher. Exceptions to the late-work penalties will only be made if there is documented communication with your teacher before or on the due date.
   4. **Cheating:** The Governor’s School Honor Policy will be followed.
   5. **Technology Policy:** The RCPS Acceptable Use Policy and the RVGS student handbook policy will be followed.
   6. **Extra help:** Every student has the ability to succeed in RVGS Biology. We are available before class, during class, after class, and though online virtual meetings to help you figure out what strategies will work best for you to be successful.
   7. **Grade Access:** Parents and students will be able to view grades online. Most assignments will be graded within 5 school days of the due date.
   8. **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. Please feel free to discuss your report with your instructor.
   9. **Student Performance Strategy:** Interventions will be implemented at the teacher’s discretion or in the event that the student's grade falls below an 80.
2. **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.
3. **General classroom procedures\*** 
   * 1. **Cell Phones:** Cell phones will be placed in the caddy at the front of the room at the beginning of each class period. If there are circumstances which require the student to have a phone during class, they should communicate that to their teacher.
     2. **Drinks/Food:** Drinks and food are allowed in the biology lab at the student tables during lecture. During labs, all food and drink should be put away.
     3. **AP Biology Exam:** Due to the scope of topics and issues addressed, RVGS Biology covers much (but not all) of the material that appears on the advanced placement biology exam. RVGS Biology covers considerable material that is not part of the AP exam. Students who plan on taking the AP Biology exam in May should consult with their teacher early in the year and purchase an AP review book for use throughout the year.
     4. **Electronic Files:** Students are expected to keep electronic copies of work in places where they are accessible when needed and to keep back-up copies. Work turned in late due to computer problems is not exempt from late work penalties. It is recommended that each student saves work on a USB pen drive and on the student network drive.