

Biology 2018

SYLLABUS

Southampton High School

INSTRUCTOR: Mrs. L. Matthews

COURSE TITLE: Honors Biology

CONTACT: Ph# 653-2751 or lmattthews@southampton.k12.va.us

PREREQUISITE: NONE

COURSE DESCRIPTION: Biology is an exploration into living systems. A student's natural sense of curiosity and inquiry is developed to promote the student's ability to explore their natural surroundings and have them think of the appropriate questions to further their understanding of biology. In order to answer these questions, students are introduced to how scientists explore the world through scientific investigations and methods. Using these methods, students will then investigate biochemical life processes, cellular organization, and mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time.

REQUIRED TEXT: Biggs, A. et al. (2004). *Biology: The Dynamics of Life*. (4th ed.). New York, NY: McGraw-Hill Glencoe. ISBN: 0078299004

MATERIALS

- I. 3 ring binder 11/2 – 2-inch ring & loose leaf paper
- II. Section dividers 5-10
- III. color pencils, 1 dryerase marker, #2pencils

SCIENCE DEPARTMENT RULES

1. Be in your assigned seat, working when the tardy bell rings(3T=1Abs.)
2. Remain seated at the end of class until the teacher dismisses the class.
3. Passes out are at the discretion of the teacher.

ATTENDANCE

This is a semester class. You can only miss 8 excused/unexcused days. On the 9th day you will lose credit for the class. School Approved and Doctors notes do not count in you attendance. Doctor approved days will however count against your exam exemption, unless you have on going medical note in the office such as orthodontist, physical therapy etc.

GRADING POLICY:

In accordance with Southampton High School regulations,

➤	Bio H
TEST	40
QUIZ	15
DAILY	20
HOMEWORK	10
LAB//PROJECT	15

➤ **Grading Scale: A 100-90 B 89-80 C 79-70 D 69-60 F 59 & below**

Pacing Guide/Course Outline Biology

I. Scientific Investigation Bio. 1 a-m 2 WEEKS

- A. metric measurement
- B. scientific method
- C. lab safety
- D. qualitative/quantitative data

II. Ecology Bio 8 a-e 2WEEKS

- A. Principles of ecology
- B. Biomes/communities
- C. Population biology
- D. Biological diversity/conservation

III. Cells Bio 2 a-d, 3 a-e,4b.5c 2WEEKS

- A. Chemistry of life
- B. Cell structure and function
- C. Cellular transport
- D. Energy transport

IV. Genetics Bio 5 a,b,d,f, g,h,j,i 6WEEKS

- A. Mitosis/meiosis
- B. DNA/protein synthesis
- C. Mendelian genetics
- D. Patterns of human inheritance

V. Evolution Bio 4 c,6 a-e, 7a-e 2WEEKS

- A. History of life
- B. Theories of evolution
- C. Primate evolution
- D. Organizing life's diversity/classification

VI. Invertebrates/ Vertebrates

Bio. 4 c

2WEEKS

- A. What are animals
- B. Sponges to echinoderms
- C. Fish/amphibians
- D. Reptile/birds
- E. Mammals

2 WEEKS BUFFER FOR WEATHER ETC

CLASSROOM PROCEDURES AND METHODS:

Teaching methods will include but are not limited to lecture, lab, group discussions, question and answer sessions, Internet activities, co-operative learning activities virtual labs on computer.

Some general procedural rules include:

- All Daily Work **MUST BE TURNED IN BY THE END OF CLASS.**
- Upon arrival to class have a seat and begin working on warmup question on the smartboard,
- Papers without a name will lose 10 pts 1st time, 20 pts 2nd time and no credit there after.
- When long term/ weekly assignments are due they are **DUE!!** Late work will have a 20pt penalty from grade actually achieved on work.(i.e. grade is 90 but it was late so it's a 70)
- All work is to be turned into a tray with color folder based on class period.
- Restroom passes will be limited.
- While I am giving notes, leading discussions, you are to remain seated.
- Please refrain from touching computers, smartboard or other items in this classroom until told to do so.
- **All rules in student handbook will also be enforced. (i.e. dress code, food in commons only, etc)**
- Cell phones handout from the school division will be in new handbook and reviewed by the teacher.

MAKE-UP WORK

It is your responsibility to get makeup work. There is a notebook on teacher's desk that says "MAKE UP WORK" check in color coded folder for any worksheets/assignments. **You are to ask a classmate for the notes.** Work is due within **5 days of an absence or when assigned by teacher.** School Approved do not carry a 5 day due date, work is to be turned in upon the next class meeting. **Extra Help will be available Thursdays 3:00 to 4:00pm. (You must have ride, I can not stay for activity bus), also mornings by appointment**

CLASS EXPECTATIONS: As a student in this course you are expected **to complete your assignments**, act in a professional manner and learn as much as you can. **Your participation in the class is essential to your learning. You will get out of this class what you put in. The more active you are in your learning the easier it is to retain the information.** This class is designed to provide the structure and support necessary to encourage independent and self-directed learning. Lecture will provide us with a basis to begin our discussion of Biology. However, it is your participation and your ability to relate these concepts to your everyday life that will make them "real" to you. As your teacher for this course, **I am here to be a resource in your learning. Please utilize this resource. Take advantage of any extra help offered as well as using our school web pages for links that also help.**

The quickest way to contact me will be through the Remind app to join: Enter number 81010 text: @h6kbc

You may follow my class post for Biology, Physics and Environmental Science at @laurafmatthews—I'm still learning how to use twitter so it may take me awhile to get it going.

FEES--TBA