

INTRODUCTION TO BIOLOGICAL SCIENCES I

BIOL 151 SPRING 2019

Instructor: Jaclyn Vick, Ph.D.

Office: [Removed]

E-mail: vickjk@vcu.edu

Meeting time and location:

[Removed]

Office Hours:

[Removed]

Required Materials:

- *Biology: How Life Works* 2nd ed. **with LaunchPad**
 - by Morris et al.
 - ISBN-10: 1-319-01599-9
 - Hard cover, loose leaf, and e book are all acceptable, just make sure you get an access code for LaunchPad with the textbook.

Important Dates:

- Exams
 - Exam 1: [Removed]
 - Exam 2: [Removed]
 - Exam 3: [Removed]
 - Exam 4: [Removed]
 - Cumulative Final Exam:
 - Section 001 [Removed]
 - Section 002 [Removed]
 - Add/Drop: last day [Removed]
 - Last day to Withdraw: [Removed]
- } Only top 3 exam scores count
} towards your course grade

Course Policies

Course description:

This course is an introduction to major biological principles including cell biology, energy and metabolism, genetics, and inheritance. The major goal of this course is to provide you with a strong foundation for future courses in biology. Whether you pursue a degree in biology or not, by the end of the semester you will have developed your problem solving and critical thinking skills. You will also be able to speak the “language” of biology.

Course objectives:

By the end of the semester you should:

1. Be able to describe the component of cells and their functions
2. Be able to explain cellular processes including photosynthesis, mitosis, meiosis, gene expression, and cellular respiration
3. Be able to describe the flow of energy within an organism to maintain life and the transfer of energy.
4. Be able to explain the transfer of genetic information across generations

Grading:

There are 5 exams this semester. The first four exams are each worth 50 points but only the top three scores count towards your final grade for the course (i.e. your lowest score is dropped). The cumulative exam (i.e. the 5th and last exam of the semester) is held during finals week and this exam cannot be dropped. In addition, various assignments, activities, quizzes, etc. will be assigned on LaunchPad. LaunchPad counts as 20% (i.e. 50 points) of your overall grade. Letter grades will be assigned based on a 10 point scale (i.e. 90% and up is an A, 80-89% is a B, etc.).

Top 3 exam scores from first 4 exams (50 pts each)	150 points
Final exam score	50 points
<u>Launchpad assignments</u>	<u>50 points</u>
Total	250 points possible

Blackboard:

<http://blackboard.vcu.edu>

You will find information for our course on blackboard. You will need your VCU e-mail address and password to log in. Content posted on blackboard is property of Jaclyn Vick. If you post my notes, exams, or any other content available on Blackboard on a third party website, you will be reported to the honor council. *You are responsible* for ensuring that your grades are accurately recorded on Blackboard. Mistakes occur and will be corrected when they are discovered. Grades posted to Blackboard are for information purposes ONLY. I do not use Blackboard to calculate grades.

Attendance:

While I will not take attendance, you should plan to attend every lecture. If you miss class, then it is *your responsibility* to find out from another student what you missed and to get the notes.

LaunchPad:

At the beginning of the semester students will be provided with more detail regarding LaunchPad activities that are to be completed online. Assignments, activities, quizzes, etc. will be added by the instructor throughout the semester based on the progress of the class. You will be required to complete activities on a weekly basis. This is a valuable resource to help improve your learning and understanding of course material. Each assignment will have a due date and must be completed on time to receive credit. Assignments not completed by the due date **cannot be made-up**. If you encounter a technical problem with Blackboard contact customer support for LaunchPad. Contact information can be found on Blackboard. Complete assignments early to avoid problems.

Exams:

All exams will be multiple choice in format and taken in class on the dates indicated. **No make-up exams will be given**. If you have to miss an exam for any reason (e.g. illness, vacation, car problems, showing up late to the exam) then that will count as your dropped exam score. Make-up exams will only be provided under extreme circumstances as decided by the instructor. On exam days, bring a #2 **pencil** and your **student ID**. You will need to provide your **V#** on the answer sheet so be sure to have it memorized. Arrive early as students who arrive after the first student has turned in the exam will not be allowed to take the exam. **NO cell phones, tablets, or any other electronic devices can be used during the exam**. During the exam, keep your eyes on your own exam and keep your answer sheet covered.

BIOL 151**List of lecture topics and associated chapters**

We will cover the following course material* in the order presented. Please note that not all chapters are listed in numerical order. Chapters listed are for *Biology: How life works* 2ed. by Morris et al. *Time permitting

<u>Chapter</u>	<u>Topics</u>
5	Cell membranes, cell transport, organelles
10	Cytoskeleton, ECM, cellular movement, cell junctions
11	Cell cycle, mitosis, meiosis, cancer
6	Energy, metabolism, chemical reactions, enzymes
9	Cell signaling
7	Cellular respiration and glycolysis
8	Photosynthesis
3	Structure of DNA, transcription
4	Translation, amino acids, proteins, gene expression
12	DNA replication
14	Mutations, DNA repair
16	Mendelian genetics, inheritance
17	Sex chromosomes, genetic linkage

Students should visit <http://go.vcu.edu/syllabus> and review all syllabus statement information. The full university syllabus statement includes information on safety, registration, the VCU Honor Code, student conduct, withdrawal and more.