

**HOWARD UNIVERSITY  
COLLEGE of ARTS and SCIENCES  
COMPREHENSIVE SCIENCES**

**Fall 2017**

**Life Sciences Laboratory Schedule**

**Laboratory Instructor:** \_\_\_\_\_

**Day and Time:** \_\_\_\_\_

**\*\*\*ALL SCHEDULED LABORATORIES MEET IN ROOM 117 E. E. JUST HALL (BIOLOGY BUILDING)\*\*\***

**GENERAL GUIDELINES**

1. Each student is held fully responsible for laboratory attendance and participation in the weekly laboratory exercises.
2. Announced quizzes are given in the laboratory. These are usually short answer and objective type tests.
3. Laboratory work constitutes 40% of the TOTAL COURSE GRADE.
4. You must attend your laboratory at your assigned section time. Make-up work for the laboratory cannot be done. (If you happen to miss your regularly scheduled laboratory class, make sure you attend another laboratory class scheduled at a different time.)
5. Laboratory exercises and lecture material have been correlated as closely as possible for this semester's work. Consult your lecturer if you need assistance in understanding the lecture-laboratory interaction.

**LABORATORY FEES STATEMENT**

The laboratory fee that is assessed for this course is used to supplement the expenditures for the purchase of equipment; permanent, temporary, and fresh consumable supplies; and for the repair, replacement, and the maintenance of equipment and supply items that are used in the laboratory.

SCHEDULE OF EXERCISES/ EXPERIMENTS	LABORATORY EXERCISES/ EXPERIMENTS	LECTURE TOPICS
August 21 <sup>st</sup> , 2017	<b>Overview of life Sciences Laboratory</b>	
August 28 <sup>th</sup> , 2017	<b>Introduction to the Laboratory</b> 1. Laboratory Procedures and Protocol 2. Laboratory Safety 3. Laboratory equipment and Use 4. The Metric System	Unit 1: Introduction to the Sciences
September 4 <sup>th</sup> , 2017	<b>University Closed—Labor Day</b>	
September 11 <sup>th</sup> , 2017	<b>Scientific Methodology</b> 1. Scientific Investigations a. Gathering, Analyzing and interpreting Data b. Types of Data c. Graphs	Unit 1: continued
September 18 <sup>th</sup> , 2017	<b>Taxonomy</b> 1. Classification of Organisms 2. Scientific names 3. Single-celled and Multicelled Life form 4. The evolution of Life Forms	Unit II: Taxonomy
September 25 <sup>th</sup> , 2017	<b>Quiz #1</b> <b>Structure and Physiology</b> <b>Structure and Physiology of Life</b> <b>The Chemical Composition of Life</b> 1. Inorganic Molecules 2. Organic Molecules in Life Forms (Qualitative and Quantitative Tests) 3. pH (Buffers, Solutions)	Unit III: Structure and Physiology of Life Forms
October 2 <sup>nd</sup> , 2017	<b>Structure and Physiology</b> 1. The Microscope 2. Cells (Unicellular and Multicellular organisms) 3. Tissues (plants and animals)	Unit III: Continued

SCHEDULE OF EXERCISES/ EXPERIMENTS	LABORATORY EXERCISES/ EXPERIMENTS	LECTURE TOPICS
October 9 <sup>th</sup> , 2017	<b>Quiz #2</b> <b>Structure and physiology</b> 1. Plant Organ systems and Organs 2. Animal Organ Systems and Organs 3. Individual Multicellular plants and Animals	Unit III: Continued
October 16 <sup>th</sup> , 2017	<b>Genetics</b> 1. Inherited traits in Life Forms 2. Mitosis 3. Probability 4. Bioinformatics	Unit IV: Genetics
October 23 <sup>rd</sup> , 2017	<b>Quiz #3</b> <b>Reproduction and Development</b> 1. Kingdom Monera 2. Kingdom Protista 3. Kingdom Plantae 4. Kingdom Fungi 5. Kingdom Animalia	Unit V: Reproduction and Development
October 30 <sup>th</sup> , 2017	<b>Metabolism and Homeostasis</b> 1. Enzymes 2. Homeostasis-demonstration 3. Metabolism—demonstration	Unit VI: Metabolism Unit VII: Homeostasis
November 6 <sup>th</sup> , 2017	<b>Evolution and Ecology</b> 1. The Evolution of Life Forms 2. Campus Ecology Survey	Unit VIII: Evolution Unit IX: Ecology
November 13 <sup>th</sup> , 2017	<b>Quiz #4</b> <b>Make-ups</b>	
November 20 <sup>th</sup> , 2017	<b>Lab-Wrap-up</b>	
November 27 <sup>th</sup> – 28 <sup>th</sup> 2017	<b>Final Exam for Graduating Seniors</b>	
December 5 <sup>th</sup> , 2017	<b>Final Examination 1:00 p.m.—3:00 p.m.</b> <b>Comprehensive—Lecture and Laboratory information</b> <b>Location—Biology Building Auditorium or TBA</b>	

**LIFE SCIENCES LABORATORY****TENTATIVE LABORATORY QUIZ SCHEDULE**

<b><u>Quiz#</u></b>	<b><u>Date</u></b>
Quiz 1	September 25 <sup>th</sup> , 2017
Quiz 2	October 9 <sup>th</sup> , 2017
Quiz 3	October 23 <sup>rd</sup> , 2017
Quiz 4	November 13 <sup>th</sup> , 2017
Make-Ups	November 13, 2017

**Graduating Seniors Final Exam: Monday, November 27, 2017  
Tuesday, November 28, 2017**

**Final Exam: Tuesday, December 5<sup>th</sup>, 2017, 1:00 pm -3:00 pm**

**Comprehensive—Lecture and Laboratory  
Location: Biology Building Auditorium or TBA**