



SOUTHERN UNIVERSITY – SHREVEPORT, LA

SU College Connect Program

FALL 2020 – SPRING 2021

Revised: July 23, 2020

Course Syllabus

GENERAL BIOLOGY FOR NON MAJORS - SBIO – 103S

THREE (3) Credit Hours

SUSLA Mission Statement:

Southern University at Shreveport, a unit of the Southern University and A & M College System, a historically black comprehensive community college serving Northwest Louisiana and beyond, is committed to teaching and preparing traditional and non-traditional students for degree attainment, transfer, workforce, continuous learning and self-improvement. This preparation is available through multiple delivery methods and instructional sites for students seeking certificates, technical diplomas and associate degrees.

Course Description:

This course is designed to provide students an exposure to the principles and the basic concepts of biology. Emphasis is on the cell and the molecular aspects of cellular activities. Because this is a three (3) credit hour course, laboratory experiences will not be provided.

Textbook(s) and Material(s):

Mader, Sylvia, Biology, 12th Edition, McGraw Hill, 2016.

ISBN: 978-0-07-802426-9

Additional handouts and PowerPoints

Course Learning Outcomes:

After completion of this course,

Students will: be able to:

1. Use the scientific method to solve problems
2. Describe the characteristic of and classify living things based on structural similarities
3. Use appropriate calculations, measuring, weighing, and compile data using metric units
4. Name parts of and use the compound microscope
5. Identify types and name parts of prokaryotic and eukaryotic cells
6. Use the periodic table to group elements with an understanding of their chemical properties
7. Name the types of organic molecules and group common foods based on their chemical properties
8. State the differences in unicellular and multicellular cell reproduction
9. Identify the stages and compare cell reproduction in both body and sex cells

10. Make informed choices, research, scrutinize, present information from science articles, journals and magazines, with as educated and critical eye

Attendance:

Students are required to log in to Moodle daily, as a minimum of this course obligation. Failure to observe this policy may seriously jeopardize a student's class performance, as announcements may be made regarding specific assignments. The basis for class attendance is the submission of assignments. Excused absences should be brought to the attention of the instructors by the student. The following class attendance policies apply:

A student required to be absent from class because of illness or other unavoidable circumstances should promptly report the reasons to the instructor and, if required present excuses. The instructor should make clear to the student that excuses explain absences, but do not remove them.

Excuses for participation in University sponsored activities will be initiated by the sponsoring unit and approved by the college division chair and the Office of Academic Affairs. Students who wish to be absent from classes for reasons not covered by these regulations must apply to their department for a leave of absence. All excuses or explanation must be submitted in writing to the student's department head within three school days after the student returns to classes.

Make-up Policy:

A legitimate excuse must be presented to make up any quizzes or exams. Upon receipt of the excuse, the student will have exactly one (1) week to take the make-up quiz/examination. Student must come to my office and take a hard copy of the make-up exam. Late assignments will not be accepted for any reason.

Academic Dishonesty:

The University defines academic dishonesty in two categories: premeditated and non-premeditated fraudulent behavior. Premeditated fraud is defined as conscious, pre-planned deliberate cheating with materials prepared in advance. It may consist of the following: collaborating during an exam without authority; stealing, buying or otherwise obtaining all or part of an examination; using specially prepared materials; selling or giving away all or part of an examination or examination information; bribing another person to obtain an examination or information; substituting for another student, or permitting another person to substitute for oneself to take an examination; submitting as one's own any work prepared totally or in part by another; selling, giving or otherwise supplying materials to another student for use in fulfilling academic requirements (e.g., assignments, course project, etc.); breaking and or entering a building or office for the purpose of obtaining examinations (administered or un-administered); changing, or being an accessory to the changing, of grades in a grade book, on an examination paper, or on other work for which a grade is given, or a "drop slip" or other official academic records of the University which involve grades; proposing and/or entering into an arrangement with an instructor or receiving a reduced grade in a course, on an examination or any other assigned work in lieu of being charged with academic dishonesty; committing plagiarism – failing to identify sources, published or unpublished, copyrighted or copyrighted, from which information was taken; acquiring answers for any assigned work or examination from an unauthorized source; falsifying references; listing sources in a bibliography not used in academic assignment; inventing data or source information for research or other academic endeavors; forging the signature of a faculty member or any academic officer on an academic document; altering or being an accessory to altering the contents of an academic document (i.e. registration forms, pre-registration forms,

add/drop forms, transcripts, fee exemption forms, registration card, etc.); using computers in an act of academic dishonesty; or submitting falsified or altered transcripts.

Un-pre-mediated fraud is defined as cheating without the benefit of materials prepared in advance. It may consist of copying from another student’s assignment, examination paper; allowing another student to copy from an examination paper; using textbook(s) or materials not authorized for using during an examination. Students will receive a grade (0) and may risk being unenrolled from class. All identical assignments will receive a (0) grade.

Instructional Techniques:

The methods of instruction are, but not limited to:

1. Individual investigation
2. Discussion
3. Demonstration
4. Conference
5. Technology

Method(s) of Evaluation:

Students will be evaluated using the following methods:

1. Homework Assignments	735 points [58%]
2. <u>Examinations</u> [5 exams]	525 points [42%]
Total Points	1260 points [100%]

Grade Scale:

Southern University operates on a 4.0 grading system. Students’ academic progress is evaluated according to the following grading system.

GRADE	EXPLANATION	SCALE	QUALITY POINTS
A	Excellent	90-100	4.0
B	Above Average	80-89	3.0
C	Average	70-79	2.0
D	Below Average	60-69	1.0
F	Failure	Below 60	0.0
W	Withdrawal		0.0
AU	Audit		0.0
NC	Non-Credit		0.0
CR	Credit		0.0
P	Pass		0.0

To be in good academic standing, students are required to maintain a cumulative 2.0 average on the 4.0 system. Each grade reported as having been earned by the student at the end of a semester or summer term will be included in computing the cumulative grade point average. The student should observe that the grade “F” carries zero quality points and will be included in the computation.

Course Outline:

This outline is intended as a guideline for the course. The institution and the instructor reserve the right to make modifications in content, schedule, and requirements as necessary to enhance each student's educational experience and student learning outcomes

<u>Week</u>	<u>Topic</u>	<u>Chapter(s)</u>
I	Life, Characteristics, Organization, Process of Science Fundamentals of Chemistry	1 2
II	Periodic Table Isotopes Electron Energy Elements and Compounds	
III	Types of Bonds Chemistry of Water Acids and Bases EXAM I	1-2
IV	The Carbon Atom: Skeleton, Functional Groups, Isomers Organic Molecules Carbohydrates	3
V	Organic Molecules – Lipids, Proteins, Nucleic Acids, ATP Metric Measurements	
VI	Cells – Types, Theory, Size Prokaryotic Cell Structure and Function Eukaryotic Cell Structure and Function Eukaryotic Cell Structure and Function Differences between Plant and Animal Cells	4
VII	Cell Membrane – Models, Structure, Function, Protein Function Membrane Permeability – Diffusion, Osmosis Membrane Transport Cell Surface Modification	5
VIII	Exam II Cell Structure and Function	3-4
IX	Forms of Energy Laws of Thermodynamics, Entropy, Free Energy, Metabolism Reaction Equation Types of Rxns – Exergonic, Endergonic ATP – Energy Source, Coupling Metabolic Pathway – Role of Enzymes	6
X	Enzyme – Substrate Complex, Rate Factors, Cofactors, Inhibitors Redox Rxn, Introduction to Photosynthesis and Respiration	

XI	Photosynthesis Light Reaction, Calvin Cycle	7
	Cellular Respiration – Anaerobic, Aerobic, .Glycolysis	8
XII	Citric Acid Cycle, Electron Transport Cell Reproduction – Cell Cycle, Mitosis (Prokaryotic/Eukaryotic, Neoplastic Cell Division) Exam III	9 5 - 8
XIII	Meiosis and Sexual Reproduction – Genetic Recombination Homologous CH – Crossing Over, Fertilization Comparison of Mitosis and Meiosis	10
XIV	EXAM IV Nucleic Acids (DNA and RNA) Protein Synthesis	9-10 12, 14
XV	Final Examination	Comprehensive

Online Class:

This is an online class. Because it is online, all information will be provided through MOODLE. Students will be able to access the Course Syllabus, and Course Information related materials, examinations, study guides for upcoming examinations, assignments, and current grades will also be provided. To view this information, the steps below should be followed:

1. Click the “Moodle Learning System” Link on the SUSLA home page.
2. Click on User Login.
3. Enter user name, password, and click login.
4. Under “My Courses”, click on your Biology 104 Lecture Course to view the Announcements. and START HERE

This class will be taught strictly online. My role here is to provide online, comparable content material as a land class. In order for you to be successful in this class, the following are required:

1. Purchase the required text by the first week. If a book is not available for your use by the first week of the semester, you should contact your advisor for other options for this class. You will need your text to complete assignments at the beginning, and will not be allowed to do make up-work.
2. Read all chapters assigned (Chapters 1-10, 12, 14). You will be held responsible for all of the content within each chapter.
3. Have basic computer skills (word processing, cutting and pasting, exploring internet, downloading software (these will be provided) for opening certain virtual activities. My role is not to teach computer skills. Have access to the appropriate computer/software.
4. Follow directions for, and turn in all assignments on time (You will have from three to four each week). Make complete statements for all! DO NOT WAIT UNTIL THE LAST MINUTE TO SUBMIT ASSIGNMENTS. SUBMIT ASSIGNMENTS AND TAKE EXAMS EARLY TO AVOID LAST MINUTE PROBLEMS.
5. Notify me immediately, if there are emergencies that will interfere with you submitting assignments and completing examinations on time.

Southern University at Shreveport Notice of Non-Discrimination:

In compliance with Title IX of the Education Amendments of 1972, Title VI and VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, and other federal, state, and local laws, Southern University at Shreveport forbids discriminating or harassing conduct that is based on an individual's race, color, religion, sex, ethnicity, national origin or ancestry, age, physical or mental disability, sexual orientation, gender identity, gender expression, genetic information, veteran or military status, membership in Uniformed Services, and all other categories protected by applicable state and federal laws. This commitment applies but is not limited to decisions made with respect to hiring and promotion, the administration educational programs and policies, scholarship and loan programs, and athletic or other College administered programs. Discriminatory acts of any kind are strictly forbidden.

Any member of the Southern University and A&M College community has the right to raise concerns or make a complaint regarding discrimination without fear of retaliation. Any and all inquiries regarding the application of this statement and related policies may be referred to Dr. Tuesday W. Mahoney, Title IX Coordinator, at (318) 670-9210. Complaints may also be made via email at titleix@susla.edu or by visiting www.susla.edu/titleix.

As set forth in our policies, individuals may also file complaints with administrative agencies such as the U.S. Department of Education, Office for Civil Rights. The contact information for the local office of OCR is (214) 661-9600 is at Office for Civil Rights, Dallas Office, U.S. Department of Education, 1999 Bryan Street, Suite 1620, Dallas, TX 75201-6810. The email address for OCR is OCR.Dallas@ed.gov.

NOTE: Please see the Connect Coordinator on either the SUBR or SUNO campus for assistance with speaking with the Title IX Coordinator on your respective campus should the need arise.

SUSLA Policy on Americans With Disabilities Act:

In accordance with applicable law and university policies, Southern University at Shreveport ensures equal opportunity for all qualified students with disabilities, without regard to disability in programs and services provided by the University. This commitment is in accordance with Federal and Civil Rights Legislation, including Section 504 of the 1973 Rehabilitation Act and the 1990 Americans with Disabilities Act.