Mississippi Valley State University Academic Term & Year: Fall 2018

Department: Natural Sciences & Environmental Health

College: Arts and Sciences

Course Prefix & No.:SC 151-2/151L-2

Course Title & Credit: Survey of Biological Sciences I (Lect and lab, 4 Credit hrs)

Meeting Days /Time/ Location of Class:

MWF (Lecture)/11:00-11:50 AM/ FLW 101 T (Laboratory)/9:30- 10:45AM/FLW 138

Instructor's Contact Information: Name: Dr. Daniel Oyugi Office Location: Science and Tech: 2255

Office Hours: MWF: 10.00-10.50am; 1.00-1.50 pm T: 10.00-11.50 am; R: 11.00-11.50 am; 1.00-2.50 pm Any other time by Appointment

Office Phone No.: (662) 254-3915, 3377 E-mail: <u>Daniel.oyugi@mvsu.edu</u>

<u>**PREREQUISITE**</u>. None. But, knowledge of high school biology and or, Survey of Biological Science I would be very helpful.

<u>COURSE DESCRIPTION</u>. The study of essential biological principles of living organisms, their life processes, phylogenetic classification systems, diversity of different life forms, and their interaction with the non-living components of the environment. For non science majors.

COURSE GOALS:

- 1. To study the essential biological principles of living systems.
- 2. To study life processes of different living organisms.
- 3. To develop understanding of unity and diversity in all life forms.

Student Learning Outcome :

- 1. Students should be able to demonstrate the knowledge of basic biological processes of living organisms
- 2. Students should be able to demonstrate understanding of unity and diversity of all life forms.
- 3. The students should be able to demonstrate the application of scientific methods.

TEXTBOOK

Inquiry Into Life by Mader, S. Sylvia: 15th edition, McGraw Hill Publishers, Dubuque, IA. Inquiry Into Life Lab Manual by Mader, S. Sylvia, T. Damron, and E. Rabitoy. 15th ed., McGraw Hill Create, Dubuque, IA.

1.The Study of Life(Ch.2.The Molecules of Cells(Ch.3.Cell Structure and Function(Ch.
2. The Molecules of Cells (Ch. 2) 3. Cell Structure and Euroption (Ch. 2)
3 Cell Structure and Function (Ch.)
J. Cell Structure and Function (Cli.
4. Membrane Structure and Function (Ch. 4)
5. Cell Division (Ch. :
6. Metabolism: Energy and Enzymes (Ch. e

8. Photosynthesis

(Ch. 7) (Ch. 8)

USE OF TECHNOLOGY.

Technology is integrated into the course to enhance and facilitate learning and understanding. Type of technology used includes but not limited to:

- 1. Mc Graw Hill –Connect –online assignments
- 2. Dissecting and light compound microscopes with color monitor;
- 3. Computer and LCD projector, videos
- 4. Use of Internet searches for aspects of lecture & lab materials and for homework assignments; and
- 5. Computer applications for collecting, analyzing, and displaying data.

<u>Websites</u>: http://www.innerbody.com/image/ www.anbg.gov/anbg http://biology.brookscole.com/starr

COURSE BASIC REQUIREMENTS.

Each Student is required to:

- 1. Attend class regularly on scheduled class days, unless there is a death in the family, or that you are under the care of a physician. In either case, a signed excuse from the Student Dean is required.
- 2. Complete all assigned readings from course text.
- 3. Turn in each homework on the announced due date.
- 4. Demonstrate knowledge of course content on each examination.

TEACHING & LEARNING STRATEGY.

The main instructional model for this course is collaborative learning. The instructor will set course content, course objectives, and methods of classroom assessment. The course will incorporate the following instructional strategies: class discussion, online activities, assigned readings, and/or individual projects. Students are encouraged to actively participate in activities, ask questions, and contribute comments for discussion. Students are also encouraged to offer input regarding instructional strategies and assignments. Most importantly, students are expected to be active learners and to ask for clarification when they have questions. In order to be successful in the class, it is important that students, read the assigned material, and submit assignments and be prepared to discuss what they have read. The goal of this approach is to develop active learning environment that addresses a variety of learning styles, promotes critical thinking, and fosters creativity.

EVALUATION METHODS: Lecture grades will be determined by dividing the total points you have earned in lecture by the total semester points for lecture (600), times a 100. The lab grade will be determined by dividing the total lab points that you have earned by the total semester points for lab (300), times a 100.

Assessments	Points
Assignments	100
Quizzes	50
Test	300
Exams: Midterm & Final	200
Total for lecture	650
Lab Assign	100
Lab Quizzes	40
Lab Tests (1 & 2)	200
Total for Lab	340

<u>**GRADING SCALE**</u>. A = (90-100), B = (80-89), C = (70-79), D = (60-69), and F = (below 60).

CHEATING POLICY. Cheating in any fashion is not be tolerated, including but not limited to plagiarizing another's words, work or ideas on individual class assignments. To address the situation of plagiarism, the University has implemented *Turnitin* to fight plagiarism and improve reading, writing, and research skills. *Turnitin* is a comprehensive plagiarism prevention system that lets faculty quickly and effectively check all students' work. Results are based on exhaustive searches of billions of pages from both current and archived instances on the Internet. Plagiarism will result in at least a failing grade for the assignment(s) and/or course. Cheating of any kind is absolutely NOT allowed. Students caught cheating run the risk of loosing several points to all the points allowable for that particular examination or quiz.

MAKEUP EXAMINATION. Makeup examination will not be given unless the student has a legitimate excuse for failing to take one on the scheduled day and time. Such a student must make arrangements with the instructor for a makeup examination within 5 days from the missed exam date.

Few Class rule

- 1. Please arrive on time and ready to work
- 2. No food and drink in the classroom
- 3. Turn off the pagers and the cell phones before coming to the classrooms

4. At the end of the Lab period, please clean up your work area. Return the microscopes in the designated area and slides to their trays.

<u>OFFICE HOURS</u>: The above office hours are reserved for you. Come in and ask questions on lecture or lab materials that you have not already mastered, or use the time to explore aspects of science, careers, academic events, etc., which may be of particular interest to you.

STUDENTS WITH SPECIAL NEEDS

Mississippi Valley State University is committed to providing reasonable accommodations for students with a documented disability. If you feel you are eligible to receive accommodations for a covered disability (medical, physical, psychiatric, learning, vision, hearing, etc.) and would like to request it for this course, you must be registered with the Services for Students with Disabilities (SSD) program administered by University College. It is recommended that you visit the Disabilities Office located inside the EMAP Computer Lab in the Technical Education (IT) Building to register for the program at the beginning of each semester. If you are determined to be eligible after your confidential consultation, you will be provided with a Memo of Accommodations that must be submitted to each of your instructors. For more information or to schedule an appointment, please contact Mr. Billy Benson, Jr. via phone or email at 662-254-3005 or billy.benson@mvsu.edu.

REFERENCES.

- 1. Brooker, Robert J., Eric P. Widmaier, Linda E. Graham, and Peter D. Stiling. Biology, McGraw-Hill Higher Education, Dubuque, IA.
- 2. Mauseth, J. D. 2003. Botany: An Introductory Plant Biology. fifth Ed. Jones and Bartlett Publishers,
- 3. Starr, Cecie., 2009. Biology: Concepts and Applications. 9th edition, Brooks/Cole.

As the instructor, I reserve the right to make any changes to this syllabus as found necessary. Further, this document does NOT constitute a contract with the University. It contains only guidelines for this course.