

**Southwestern Indian Polytechnic Institute
Liberal Arts Department**

**Biology for Health Sciences
Syllabus**

1. Course Information:

Course Number: Biology 123

Course Title: Biology for Health Sciences with Lab

Credit Hours: 4

Catalog Description:

Through the investigation and examination of basic structural and functional characteristics of the human body, its cells, tissues, organs, and systems the student will be able to apply basic biological principles to all subject material covered throughout this course. Appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory.

Prerequisite(s): English 100 and Math 100 with a C grade or better

2. Course Learning Outcomes:

After a systematic study of course material the student should be able to:

- Unit 1- Describe the study of Biology, Cell Structures and Functions
- Unit 2- Explain Cellular Respiration
- Unit 3- Explain Mitosis - Meiosis
- Unit 4- Explain Genetics and predict Genetic outcomes of offspring
- Unit 5- Identify major types of Tissues and their Functions
- Unit 6- Identify Major Organs and Glands of the Human Body
- Unit 7- Identify Organ Systems of the Human Body
- Unit 8- Describe the process of Immunity
- Unit 9- Describe the Anatomy of the Nephron
- Unit 10-Describe the CNS and PNS of the Human Body
- Unit 11-Describe Human Reproduction

The most important thing you can do while in class is take notes. Make sure that you note page numbers and diagrams that are brought to your attention during lecture.

3. Instructional Units

1. Introduction to biology and characteristics of living things.
2. Basic chemistry
3. Cell structure and function
4. Energetics of cells
5. Nucleotide structures, DNA and RNA
6. Mitosis and Meiosis
7. Mendelian genetics
8. Cell types and tissue types, body cavities and membranes
9. Integumentary system
10. Digestive system, enzymes and nutrition.
11. Cardiovascular and lymphatic system, immunity
12. Respiratory system
13. Urinary system and excretion
14. Nervous system
15. Human Reproduction

Biology for Health Sciences Syllabus Fact Sheet

1. Course Information:

Course Number: Biology 123

Course Title: Biology for Health Sciences with Lab

Credit Hours: 4

2. Course Instructor:

Instructor: Harold Kihega

Office Location: Science Technology Building, Room 252

Office Hours: Please check my office door for office schedule

Telephone Number: (505) 346-7729

Email: Hkihega@sipi.bia.edu

3. Course Specifics:

Textbooks: Inquiry into Life, McGraw Hill Publishing, Tenth Edition, 2004, Mader

Evaluations:

Five exams will be given during the semester. Each exam is worth 100 points, including the MIDTERM and a comprehensive FINAL counting as 200 points. All lab work including tests is worth 200 points. In class quizzes and homework are worth 100 points.

Homework assigned must be completed to receive full course credit. You are responsible for spelling correctly scientific words covered in lecture and laboratory. Each misspelled word is ¼ point off your test score.

You must complete all work assigned to receive a grade at the end of the semester!!!!

There are no make-up exams in class or laboratory.

Quizzes:

There will be quizzes, usually announced. Quizzes are generally derived from homework assignments. The purpose of these quizzes is to encourage attendance and promptness to class and, therefore, **CANNOT BE MADE UP IF MISSED.**

Grading Policy:

The following grading scale is used:

100 – 90 =A

89 – 80 =B

79 – 70 =C

69 – 60 =D

59 – 0 =F

Examination Schedule: A minimum of 3 days notice will be given for exams

Exam #1: Unit 1 and 2

Exam #2: Unit 3 and 4

Midterm Exam

Exam #3: Unit 5 and 6

Exam #4: Unit 7 and 8

Final Comprehensive Exam

Two Lab Exams will be administered throughout the semester.

Homework is required for this course, **your final grade will be lowered one letter grade for each homework assignment that is not completed.**

Course Policies:

This course is comprised of textbook information as well as classroom notes. Students are expected to come to class prepared. It is imperative that you do the assigned homework. Attendance is important for success in this course and will be monitored closely. The class attendance system currently in effect at SIPI is used to indicate to students and their advisors of class status due to excessive absences. School sponsored activities will not count against the student if the instructor is notified before the absence. It is the student's responsibility to get assignments completed prior to the absence. If there is a problem, you need to visit with the instructor before or after class. If tardiness or attendance becomes a problem, the instructor reserves the right to drop you from this course. Please turn off your cell phones prior to entering class or lab.

Accommodations for students with special needs:

Southwestern Indian Polytechnic Institute complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students with disabilities who need accommodations should make their request by contacting the Disability Service Coordinator.

