- Students are advised to consult the VSU Student Handbook, Undergraduate Catalog, Semester Calendar, Schedule of Classes, & Registration Guide for information about VSU policies and procedures regarding registration, drop/add, and withdrawal. Students are not permitted to withdraw after midterm except in cases of hardship.
- Students requesting classroom accommodations or modifications because of a documented disability should contact the Access Office for Students with Disabilities. 1115 Nevins Hall.
- 4. Cell phones are to be turned off during classes and examinations.
- 5. Students are responsible for reading and following the Biology Department policy on plagiarism.
- 6. Since important concepts are explained in the classroom, missing classes may seriously impact grades.
- 7. Make-up examination or quiz WILL NOT BE OFFERRED, except under exceptional and unavoidable circumstance. If offered, it will be at the discretion of the Instructor, AND will not carry full earned points.
- 8. Changes to this syllabus may be made during the Semester.

GRADES:

- (1) There will be tests, a mid-term examination and a final examination. Tests and exams typically consist of multiple choice, matching, fill-in blanks type of questions, including some open book. However, students may be challenged with questions that may require creative thinking and true understanding of concepts in order to answer them correctly.
- (2) In addition, there may be special assignments and projects which will be announced in the class.
- (3) Vocabulary, spelling and pronunciation of medical terms may be important parts of assignments, tests and examinations.
- (4) Lab. portion of testing will be merged with lectures.
- (5) Tests will be worth a total of 150 points.
- (6) Mid-term examination will be worth 150 points.
- (7) Special projects or presentations will be worth 50 points.
- (8) Final examination will be worth 250 points.
- (9) Between tests, mid-term, final examination, special projects and presentations, each student can earn a maximum of 600 points.

GRADING SCALE:

Grade A = 90 -100% or between 540 and 600 points Grade B = 80 - 89% or between 480 and 539 points Grade C = 70

Week 1

Subject(s)

General course information Introduction to Microbial World Introduction to Microscopy Personal and patient safety in healthcare environment Safety in microbiology laboratory

Week 2

The Molecules of Life

Microscopy and Cell Structure

Use of Microscope, Practice of focusing on human blood components

Practice of using oil immersion lens

Week 3

Microbial Metabolism. Physiology and Genetics

Examination of microscopic life in pond water - Protozoa, Algae,

Cyanobacteria

Culture of normal environmental and body flora

Week 4

Host Defense Mechanisms Role of normal flora and physical

barriers to infections

Natural and Acquired Immunity

Study of growth acquired from environmental and body flora Colony characteristics and simple stain of recovered bacteria

Week 5

FIRST TEST

Infectious Disease Process How Microbes survive host defenses

and cause infection Importance of Gram Stain

Gram Stain of bacteria recovered from previous exercise

Learning Objectives

History of Microbiology, role of microbes in nature, well-being of other living things, science, health and diseases. Introduction to Microbiology

Laboratory Safety, hand hygiene Proper handling and use of microscope

Characteristics of prokary otic and eukary otic cells Principles of microscopy, use of microscopes Distinction of various groups of bacteria

How microbes live and multiply Study of higher forms of microbial life What grows where?

100 W. A

How physical make-up of human body defend against infections What are natural, acquired and artificial means of

combating infections Are our counters, keyboards, drains, toilet seats,

door handles AND our mouths, skin and noses STERILE? What do they grow?

Organism mutation, virulence, drug resistance, avoidance of phagocytosis

Gram Stain as an important diagnostic tool

Week 6

Control of Microbial Growth 363.69 259.64 27.6 reW*n /P &MCID 2>BDC