Syllabus: General Biology I The School of Arts & Sciences St. Thomas Aquinas College

COURSE DESCRIPTION:

Introduction to biological principles including the scientific method, classification and characteristics of major bacteria, protists, fungi and plant groups and ecology. Three lecture hours and one recitation hour per week. Corequisite BIO 173. [General Biology Laboratory I {Biology173}) is a companion course to General Biology I [Biology 171] with separate grading and syllabus.] Biology majors must obtain a "C" or better in the two semesters of Gen Bio courses (Bio 171,172,173 and 174 to proceed to 200 and above level Bio courses.)

COURSE OBJECTIVES:

Knowledge – Students will be able to:

- Give the three domain system of classification and its basis.
- Describe the similarities and differences of organisms in the five kingdoms.
- Describe the major types of protists and fungi and how they differ.
- Appreciate the great similarities among organisms.
- Know and apply the steps of the scientific method.
- Explain the structures and functions of the major organ systems in plants.
- Describe advantages that the major plant groups have over earlier ones.
- Explain how animals and plants interact with each other and with their environment.
- Be able to predict the structure and/or behavior of organisms based on their classification.

EVALUATION:

There will be 4 lecture exams on the topics listed on the following page. References are to the chapters in the text

REQUIRED TEXT:

Life, The Science of Biology by Sadava, Hillis, Heller and Berenbaum 9th ed. 2011

ATTENDANCE:

Attendance is mandatory and will be recorded for each class meeting. Absences for more than 15% of the total course hours will result in a lower grade.

CLASS LECTURE SCHEDULE:

<u>Topics</u> Definition and Hierarchy of Life	<u>Chapters</u> 1
Life processes Structure and function of cells Biomolecules: Structures and function	4-5
Exam 1	
Energy: photosynthesis Mitosis Kingdoms and Domains Archebacteria and eubacteria Prokaryotes and Eukaryotes: Structure and Function Plantlike protists	6-8 9 26 22 23
Exam 2 Fungi The plant kingdom	24
Plant structure and function Roots	25 29
Exam 3 Stems Leaves Plant hormones Ecology	29-30 30 31 53
Exam 4	

ACADEMIC INTEGRITY

Academic integrity, a commitment to honesty, fairness, respect, and responsibility, is the foundation of the learning process. All members of the St. Thomas Aquinas College community are held to the highest standards of academic honesty. While we recognize the participatory nature of education, w take academic integrity very seriously, and the College policy on academic dishonesty details consequences that can include dismissal from the College. That policy can be found in both the Student Handbook and the College Catalog.

As a student in this class, you must demonstrate your commitment to academic integrity by submitting work which originates in your own imagination, analytical faculties, or your own knowledge, which you have done yourself, and which represents your very best efforts. When appropriate, your work should be supplemented and supported by other sources; however, you must always ensure that these sources are properly cited using the recommended documentation system.

Students needing accommodations for a documented disability should notify the instructor at the beginning of the semester.

COLLEGE POLICY ON ELECTRONIC DEVICES IN THE CLASSROOM

Students are not to use any electronic device at any time without the expressed consent of the professor. This policy includes cell phones, laptop computers, or any other device the use of which constitutes a distraction to the professor or to the other students in the class as determined by the professor. Students with documented disabilities that require the use of a laptop in class may use them after informing their professor.

When a professor designates a time during which laptop computers may be used, they are only to be used at the discretion of the faculty member and in accordance with the mission of the college; visiting sites which the professor deems to be inappropriate to the needs of the class is forbidden..

Professors have the latitude to develop specific and reasonable policies to deal with violations of these general policies as they see fit. For more extreme cases of classroom disruption, see the College's Disruptive Student Policy