Dr. Eric W. Chambers, Associate Professor of Biology

BSC 1073 Section A: (CRN# 24676) Monday, 11:00 AM – 1:50 PM Section C: (CRN# 24678) Tuesday: 2:00-4:50 PM

Bailey Science Center, Room 2214; Phone: 249-2736, e-mail: <u>ewchambers@valdosta.edu</u> Tuesday and Thursdays @10:00-11:30 AM.

A laboratory course to accompany BIOL 1108, with exercises dealing with anatomy and physiology of plants and animals.

Grade of C or better in BIOL 1107 or permission of instructor

This lab is a companion to t BIOL 1108. Lab exercises will provide you greater insight into the physiological processes of plants and animals. The lab will also introduce you to the diversity of life within the animal and plant Kingdoms as well as highlight evolutionary relationships among the phyla within these Kingdoms.

See Department of Biology Educational Outcomes and the University General Educational Outcomes as listed at the end of this syllabus

Lab Text: Grove, T. 2015. Biology Lab Manual. You can purchase the lab manual by purchasing an Access card at the Valdosta State University Bookstore.

The lab manual is an online manual. I will go over how to use this manual during the first week of class. But, briefly, each lab includes all the content necessary to understand and complete the lab. You are required to read the background information and complete the pre-lab assignment before coming to lab. The page after the pre-lab assignment contains pdfs of the exercises that you will complete during lab and another pdf with all the background information. You can either view these documents on your phone, tablet, laptop computer, etc. in lab, OR you can print them off. You will need to be able to view the background information during lab in order to complete each lab, but you do NOT need to print them off if you have an electronic method for looking at the information. There are no computers in the lab for you to use.

I will bring handouts for the first statistics lab, but I will not bring handouts for any of the later labs. If you have problems buying the manual because of slow financial aid see me. I will work with you until you are able to purchase the manual. If you are retaking the class do not buy another access code for the manual, simply email Great River Support and they will give you access. Let me know if you have issues.

informed of reasons for absences, but these are not excuses". I will consider all absences on a caseby case basis.

Students who miss 3 or more labs during the course of the semester could be subject to the stated policy. If you are absent from lab or know you will be absent from lab, please contact me within 24 hours with the reason. If I consider it an excused absence, I may be able to give you an opportunity to attend another lab session during that same week.

- . Assignments are due at the start of lab.
- A lab notebook is not required it is strongly advised to maintain a laboratory notebook with drawings, descriptions, data etc. of the laboratory exercises. The notebook will help you study for the practical exams.

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- Students must take care of lab equipment. Notify the professor if something is not working properly or if something breaks during the course of the lab
- Each student will be assigned a microscope. It is the student's responsibility to properly use the microscope. Notify the professor if your microscope is not functioning properly.
- Cell phones are not to be used in lab.

By taking this course, you agree that all required course work may be subject to submission for textual similarity review to Turnitin, a tool within BlazeVIEW.

Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-

Week of January 13 Lab 1 - Introduction to Basic Statistics (Room 3018)

- Week of January 27 Lab 7 Animal Diversity I
- Week of February 3 Lab 8 Animal Diversity II
- Week of February 10 Lab 9 Introduction to Animal Tissues
- Week of February 17 Lab 10 External and Internal Anatomy of the Fetal Pig
- Week of February 24 Lab 11 Sensory Systems
- Week of March 2 Lab 12 Circulatory System

Week of March 23	Lab 2 – Nonvascular, Seedless Plants
Week of March 30	Lab 3 – Vascular Plants
Week of April 6	Lab 4 – Plant Cells, Organ Structures, and Growth
Week of April 13	Lab 5 - Angiosperm Development
Week of April 20	Lab 6 - Growth and Transpiration

3. Students will use computer and information technology when appropriate. They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.

4. Students will express themselves clearly, logically and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.

5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments based on quantitative data.