# **Valdosta State University**

# BIOL 1108 Principles of Biology II Laboratory Syllabus Spring 2015

Laboratory (BC 1073): Section A: Tuesday 3:00 – 5:50 PM

Instructor: Dr. Eric W. Chambers

Office: Bailey Science Center, Room 2214

Phone: 249-2736

E-mail: ewchambers@valdosta.edu

Office hours: Tuesday and Thursday 1:45-2:45 pm or by appointment

Text: Grove, T. 2015. Biology Pre Lab Manual (Access card only). GreatRiverLearning.com.

#### **Course Overview:**

This lab is a companion to the lecture portion of BIOL 1108 and must be completed in order to receive full credit for the course. Lab exercises should 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.

Educational outcomes: Listed at the end of syllabus

## **Course Prerequisites:**

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

## Lab quizzes and assignments:

The lab will constitute 30% of your overall grade in BIOL 1108. Assignments will consist of weekly guizzes, homework assignments, and two practical exams.

## Pre-lab and Post lab quizzes

Each week there will be Pre-lab and Post-lab online quizzes. Pre-lab quizzes will open one week before each lab, on Tuesday mornings at 9:00 am and will close before the beginning of the next lab on Monday night at 11:59 PM. There will be no Pre-lab quiz for the first lab of the semester. The Post-lab quizzes will open at the beginning of each lab and will close before the beginning of the next lab on Tuesday afternoons at 12:00 PM.

## Homework assignments

Details concerning any required lab reports will be presented in lab.

#### **Lab Practical Exams**

There will be two practical exams, one covering the unit on plants and one covering the unit on animal diversity and physiology. Questions may include microscope slides, whole specimens and written components. Lab practical exams can only be taken the day that they are scheduled.

**Extra Credit**: I *may* provide you the opportunity to complete short extra credit assignments during the semester. More information will be provided later.

## Lab grade

50% pre-lab quizzes, post-lab quizzes and homework assignments 50% practical exams

Grade Scale A = 90 -100 % B = 80 -89 % C = 70 -79 % D = 60 -69 % F< 60 %

#### Lab Conduct:

- **Arrive on time**. Assignments are due at the start of lab. Students arriving 15 minutes late will have points deducted from their assignments.
- 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.
- No eating or drinking during the lab.
- Attendance to lab is mandatory. Excused absences are usually given for medical emergencies and documentation must be provided; the professor determines whether or not an absence is "excused" or not. If a student misses three labs <u>for any reason</u> the student cannot earn higher than a "D" for his/her final grade in the course. Labs cannot be made up outside of scheduled laboratory sessions (except under extenuating circumstances). Students are still responsible for all lab content even if they received an excused absence.
- 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. After lab the professor will check each scope to make sure that it was put away properly. Failure to do so will result in one point being subtracted from the student's total lab points (not the final percentage) each week it is not put away properly. Notify the professor if your microscope is not functioning properly.
- Cell phones are not to be used in lab

**Academic conduct:** Cheating and plagiarism will not be tolerated and may result in a failing grade for the assignment, exam or the class.

**Privacy Act (FERPA):** The Family Educational Rights and Privacy Act (FERPA) prohibits the public posting of grades by social security number or in any manner personally identifiable to the individual student. No grades can be given over the telephone or over email because positive identification can't be made.

Access Statement: 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 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: access@valdosta.edu.

**Title IX Statement:** Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, <a href="mailto:titleix@valosta.edu">titleix@valosta.edu</a>, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

## **VALDOSTA STATE UNIVERSITY GENERAL EDUCATIONAL OUTCOMES (GEO)**

- 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.

# **TENTATIVE LAB SCHEDULE AND TOPICS**

Week of August 16 NO LAB

Week of August 23 Introduction and Learn to Use Excel (Meet Computer Lab

Room 3018) (Lab 1)

Week of August 30 Nonvascular plants (Lab 2)

Week of September 6 Vascular Plants (Lab 3)

Week of September 13 Angiosperm Anatomy and Morphology (Lab 4)

Week of September 20 Angiosperm Development (Lab 5)

Week of September 27 Angiosperm Physiology (Lab 6)

Week of October 4 LAB PRACTICAL #1

Week of October 11 Fall Break No lab

Week of October 18 Vertebrate Anatomy (Lab 9 and 10)

Week of October 25 Vertebrate Sensory Systems (Lab 11)

Week of November 1 Circulatory, Respiratory, and Excretory Systems (Lab 12

and 13)

Week of November 8 Animal Diversity I (Lab 7)

Week of November 15 Animal Diversity II (Lab 8)

Week of November 22 Thanksgiving Break No lab

Week of November 29 LAB PRACTICAL #2