

BIOL 1108: Principles of Biology II Spring Semester 2013

Lecture: Sections D,E &F: Monday and Wednesday 3:30 p.m. – 4:45 pm, Room 1023 Bailey Science Center
Laboratory:

Section D: Tuesday 9:30 -12:20 am , Room 1073 Bailey Science Center

Section E: Tuesday 2:30 – 5:20 pm, Room1073 Bailey Science Center

Section F: Thursday 9:30 – 12:20 am, Room 1073 Bailey Science Center

Instructor:

Dr. John Elder

Office: BC 2088

Office hours: Monday. 10:00a.m. – 3:00 p.m., or by appointment

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BIOL 1108 Course Description. : An introduction to physiological processes in plants and animals. Structure, nutrition, transport, coordination, reproduction, and development will be addressed.

Course Objectives: The goal of this course is to stimulate student learning of these basic concepts and to encourage contemplation of the significance of each concept to the general field of biology. The course lecture focuses on basic organismal level physiological processes of plants and animals. Diversity of organisms will be addressed in lab.

Educational Goals and Outcomes:

At the end of this course students should be able to demonstrate:

1. an ability develop and test hypotheses, collect and analyze data, and present the results and conclusions
2. a knowledge of major physiological systems in plants and animals:
3. an understanding of structure/function relationships
4. a knowledge of basic nutrition
5. a knowledge of biological materials transport
6. a knowledge of reproduction
7. a knowledge of organismal development
8. a knowledge of sensory systems

These goals support the Department of Biology Education Outcome #2, #3 and #5 and VSU General Education #5 .

Required Materials:

Text: Sadava, D., Heller, H.C., Orians, G.H., Purves, W.K., & Hillis, D.M. 2008. LIFE: The Science of Biology. Current Edition. Sinauer Associates, Inc., Sunderland, MA, and W.H. Freeman & Co., Gordonsville, VA.

Laboratory Manual: Grove, T.J.. 2012. Principles of Biology II Lab Manual

“Clickers”: Each student is required to obtain a Turning Technologies NXT clicker (available in the bookstore). All students are responsible for having their clickers with them in class. All points accumulated in lecture quizzes are generated by clickers. If you do not bring your clicker, no points will be recorded for your quiz ☹. Clicker info is available at: <http://www.valdosta.edu/distance/clickers/index.shtml>. Ms. Brenda Drew Hoke (BJ) is the current Turning Technologies Intern working in the eLearning office (back behind the Help Desk in the library) and may be available to address issues students are having with clickers.

Grade Assessment: Your final grade will be based on your performance on lecture examinations, quizzes, laboratory assignments, laboratory quizzes and laboratory practical exams

Lecture:

Exams. There will be three lecture exams followed by a final exam. The final exam may or may not be cumulative at the instructors discretion. Students are required to learn the lecture material and the readings from the text for all exams. Related information presented in the laboratory may also be included in exams. Each of the exams and the final exam will be worth 100 points each. The final exam will be taken during the allotted time published online and posted below. **There are NO MAKEUP EXAMS**, with the exception of those students with a University related excuse or an emergency. Otherwise, a missed exam will be equal to zero points.

Lecture quizzes: There will be intermittent short quizzes on the readings and lecture. Overall quiz average grades will be worth the equivalent to 1 test. These quizzes will be scored using student clickers. No paper or make up quizzes will be accepted for a grade. Any missing clicker quiz grade will be assigned a zero and no makeup accepted after the class quiz. It is the students responsibility to obtain a clicker, bring it to every class and ensure their current ID is registered with this course on Blazeview.

Laboratory:

Students will be graded on their performance in laboratory based on attendance, quiz grades, group lab projects, selected homework assignments, lab practical exams and any other assignments as specified by your instructor. **There are NO MAKEUP LABS. Note that it is departmental policy that any student missing more than 2 unexcused labs or 3 labs total cannot receive a grade higher than "D" for the course.** It is your responsibility to sign in on the lab roll at each meeting.

Lab Quizzes: Quizzes are given during the first 10 to 15-minutes of each laboratory. **DO NOT BE**

LATE. You will not be allowed extra time if you are late. If you miss the quiz completely, you will receive a zero for the quiz. Some of the questions will cover the procedures and results of the previous week's exercises. Other questions will pertain to procedures for the upcoming lab. **There are no make up quizzes.**

Lab Assignments: Information for each assignment will be provided in lab.

Overall Grade Assessment:

Calculate your overall grade as follows:

$(\text{Lab average grade} \times .25) + (4 \text{ lecture exam grades} + \text{quiz grade average} / 5 \times .75) = \text{Overall percentage grade.}$

Overall letter grades will be assigned on a 10 point scale: 90-100% = A, 80-90% = B, 70-80% = C, 60-70% = D, and, 59 % and below = F.

Mid-term or in-progress grades: The instructor is required to submit in-progress grades prior to mid-term as posted (9/30/2009). In theory, a mid-term grade is necessary for a student to assess how s/he is doing in class by midterm. In this course, students will have feedback on at least one major exam by midterm, several lab quizzes, lab assignments, and any homework or writing assignments. The instructor will, in general, assign an overall average grade at this point on the normal scale of A-F viewable on Banner. Students receiving a grade of "D" or lower should therefore carefully evaluate their option of dropping this course by midterm without academic penalty.

Attendance Policy: Attendance in this course is highly recommended, unless you are sick. Students should be seated at the beginning of class. If you are late, your attendance may not be acknowledged. The student is responsible for all material missed regardless of the reason for absences. **ABSOLUTELY NO LECTURES OR LABORATORIES CAN BE "MADE UP."** Laboratories in particular are important not to miss as stated above. In the event that a student will miss a lab, s/he should notify the instructor in writing within 24 hours of the missed lab. It is the instructor's prerogative to accept the excuse or not. Attendance will be recorded for lab sessions using a lab roll. **Students who miss two labs without an excuse or three labs total cannot receive a grade above a "D" for the entire 1108 course.**

Procedure for exams and quizzes:

1. No books, electronic devices, or notebooks will be allowed during exams. Students using such items will be asked to leave and will receive a zero for the exam.
2. No talking will be allowed during the exam or quizzes.
3. Each student will be given an exam to be completed and handed back to the instructor.
4. You must bring a pencil and will take the exam during the stated lecture time only.
5. A student with **more than a single clicker in their possession during any lecture class or exam constitutes cheating** by the owners of the clickers and the person in possession of the clickers. All clickers present will be confiscated and their owners will receive a zero for the exam or the course depending on circumstances. Clickers will be returned to the owners after investigating the circumstances of the infraction.
6. **Any missing clicker quiz grade will be assigned a zero and no makeup accepted after the class quiz. It is the students responsibility to obtain a clicker, bring it to every class and ensure their current ID is registered with this course on Blazeview.**
7. No talking will be allowed during the exam, but students are welcome to come to the instructor's desk to ask questions about the exam. **Turn off your cell phones during exams!**
8. Every student should bring their University ID.
9. **NOTE:** You will have the class time only to complete each lecture exam.

Disruptive behavior: **No disruptive behavior of any kind will be tolerated in this course.** Students should restrict talking and discussion to pertinent questions related to course material and these questions should be directed toward the instructor. Entering a classroom late or early is discouraged. Any student disrupting lectures will be required to leave the classroom. Use of cellular telephones, pagers, or any similar remote communication device is prohibited during scheduled lectures, laboratories, or examinations. If students bring cellular telephones or similar devices to lecture, it is their responsibility to switch them off prior to the beginning of the lecture period. See your student handbook for specifics constituting disruptive behavior.

Cheating: Students caught cheating will receive a grade of "F" for the assignment in question and possibly for the course. Cheating will be reported to the Dean of Students. See your Student handbook for what constitutes catalogue cheating and

plagiarism. See the student handbook for specifics constituting academic dishonesty and consequences. .

Student identification: Students should have in their possession at all times their VSU student identification card. In order to verify the identification of students officially enrolled in the course, it is the instructor's prerogative to request official student photo identification cards at any time during lecture. During examinations, students will routinely be asked to display their VSU student identification cards visibly on the desk top and to make them available for inspection by their instructor and/or assistants.

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

Students with Disabilities: Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in room 1115 Nevins Hall. The phone number is (229) 245-2498.

Biology Tutoring: The Student Success Center (SSC) at Valdosta State University is located in Langdale Residence Hall above the Tech Shop and is available to all students. The SSC provides free peer tutoring in core curriculum courses, including biology, chemistry, math, writing, and foreign languages. The SSC also provides free professional academic advising and on-campus job information in one location. Call 333-7570 to make an appointment, or visit the website: www.valdosta.edu/ssc.

Important Dates:

January

- 7 - First class (labs do not meet this week)**
- 21 – MLK holiday (labs do not meet this week)**

February

- 4 – test 1**
- 25 – lab practical exam 1**
- 28 – midterm (last day to drop)**

March

- 4 – test 2**
- 16-24 Spring Break**

April

- 8 – test 3**
- 15 – lab practical exam 2**
- 29 – last class**

May

- 3 – Final exam 5:00-7:00pm**

Tentative lecture topic schedule:

- Introduction to Phylogenies
- Chapter 40: Homeostasis in Animals and the Role of Physiological Systems
- Chapter 41: Animal Hormones
- Chapter 43: Animal Reproduction
- Chapter 45: Neurons and the Nervous System
- Chapter 47: Mammalian Nervous System
- Chapter 46: Sensory Systems
- Exam 1
- Chapter 48: Muscles
- Chapter 49: Gas Exchange
- Chapter 50: Circulatory System
- Chapter 51: Nutrition and Digestion
- Chapter 52: Salt and Water Balance
- Exam 2
- Chapter 28: Seedless Plants
- Chapter 29: Evolution of Seed Plants
- Chapter 34: The Plant Body
- Chapter 35: Transport in Plants
- EXAM 3
- Chapter 36: Plant Nutrition
- Chapter 37: Regulation of Plant Growth
- Chapter 38: Reproduction in Flowering Plants
- Chapter 39: Plant Responses to Environmental Challenges

LAB SCHEDULE AND TOPICS SPRING 2013		
Week of	Lab Exercise (Pages)	Assignment or Quiz
7 Jan	Week One—No labs	
14 Jan	Introduction and Learn to Use Excel (Pg 1-10) Diversity: Porifera and Cnidaria (Pg 60-69) Vertebrate Animal Tissues (Pg 70-77)	
21 Jan	MLK Holiday—No labs	
28 Jan	Diversity: Platyhelminthes (Pg 78-83) Vertebrate Anatomy (Pg 84-91)	
4 Feb	Diversity: Annelida and Mollusca (Pg 92-97) Sensory Systems (Pg 98-104)	
11 Feb	Diversity: Nematoda and Arthropoda (Pg 105-110) Cardiovascular System (Pg 111-115)	
18 Feb	Diversity: Echinodermata and Chordata (Pg 116-118) Digestive System and Excretory Systems (Pg 119-120)	
25 Feb	LAB PRACTICAL –	
4 Mar	Diversity: Non-Tracheophytes (Seedless Plants) (Pg 11-18)	
11 Mar	Diversity: Tracheophytes (Vascular Land Plants) (Pg 19-27) Plant Anatomy-Roots, Stems and Leaves (Pg 28-36)	
18 Mar	Spring Break— No Class	
25 Mar	Angiosperm Development (Pg 37-45)	
1 Apr	Growth, Tropism, Transpiration, Environmental Responses (Pg 46-53)	
8 Apr	Pollution: Effects of Chemical, Thermal & Acid Pollution (Pg 54-59)	
15 Apr	LAB PRACTICAL --	
22 Apr		