

## BIOL 1108K Lecture: Principles of Biology II Spring Semester 2016

Lecture: Sections A,B,C,D,E,F and G: Tuesday and Thursday 8:00 a.m. –9:15 a.m., Room 1011 Bailey Science Center

**Instructor:**

Dr. John Elder

Office: BC 2088

Office hours: Monday Through Thursday: 9:15a.m. – 11:00 a.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. et al. 2014. **LIFE: The Science of Biology**. 10th Edition. Sinauer Associates, Inc., Sunderland, MA, and W.H. Freeman & Co., Gordonsville, VA.

**Or:**

**Openstax Biology:** Lucky you! Your e-textbook is free and a print version is available at very low cost!

The book is available in a wide variety of free online formats via the website listed below. You can use the book in whichever format(s) you want; we recommend that you download the entire .pdf so that you always have access to your book. Biology from OpenStax College, ISBN 1-938168-09-7, <https://openstaxcollege.org/textbooks/biology> Printed copies at a significantly reduced textbook rate are also for sale via your college bookstore or [www.openstaxcollege.org](http://www.openstaxcollege.org)

**Laboratory Manual: Electronic version**

**Title:** Biology Lab Manual, T.J. Grove, 2015, **ISBN #:** 9781680750201

**Material:** 5.5 in. X 8.5 in. Access card

**Suggested Retail:** \$50

**Bookstore Discount:** 10%

**“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>.

**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. 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 Formal University 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:** Since several different people are teaching lab sections, each will provide individual expectations for lab grades. Numerical lab grades are turned in to the lecturer for averaging into your final score for the course at the end of term.

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.

**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 (3/3/2016). 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.**

**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](http://www.valdosta.edu/ssc).

### **Important Dates:**

#### **January**

**12 - First class**

**18 – MLK Holiday**

#### **February**

**2 – Exam 1**

#### **March**

**1 – Exam 2**

**3 – Midterm – last day to drop without penalty**

**28 – 12 – 20 Spring Break**

#### **April**

**5 – Test 3**

**28 - Last Lecture**

#### **May**

**2 – Study Day \_ No Classes**

**3 – Final Test 4 ( 8:00 am – 10:00 am)**

Tentative lecture topics readings:

Introduction; Evolution: Phylogeny;

Chapter 31 Animal origins and the Evolution of Body Plans

Chapter 32 Protostome Animals

Chapter 33 Deuterostome Animals.

Chapter 40: Physiology, Homeostasis, and Temperature Regulation

Chapter 41: Animal Hormones

Chapter 43: Animal Reproduction

#### **EXAM 1**

Chapters 45: Neurons, Glia, Nervous System

Chapter 46: Sensory Systems

Chapters 47: Mammalian Nervous System

Chapter 48: Musculoskeletal system

Chapter 49: Gas Exchange

Chapter 50: Circulatory System

Chapter 51: Nutrition and Digestion

#### **EXAM 2**

Chapter 52: Salt and Water Balance

Chapter 28: Seedless Plants;

Chapter 29: Evolution of Seed Plants

Chapter 34: The Plant Body

#### **EXAM 3**

Chapter 35: Transport in Plants

Chapter 36: Plant Nutrition

Chapter 37: Regulation of Plant Growth

Chapter 38: Reproduction in Flowering Plants

Chapter 39: Plant Responses to Environmental Challenges

Review for Final Exam

#### **EXAM 4**



Course expectations:

**Procedures for Exams, Tests and Quizzes:**

1. No talking will be allowed during the exam or quizzes.
2. Each student will be given an exam to be completed and handed back to the instructor.
3. You must bring a pencil and will take the exam during the stated lecture time only.
4. You must bring a registered clicker to class and will take quizzes 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.

**General expectations and behaviors in order to do well in the course:**

- a. I understand that this is a science class and that my enrollment is voluntary. I am **here to learn the science** and I am free to drop the course if I do not wish to learn the material.
  - i. Biology is a science – it is perceived to be hard for many people.
  - ii. As is true for any scientific discipline, the study of biology requires a large body of highly detailed and technical information that must be mastered.
  - iii. Biology, as is true for any science, has a large amount of technical terminology that must be mastered.
  - iv. It is not sufficient to simply “memorize” the facts and terminology, but one must also understand the many concepts relevant to modern biology.
- b. I understand that my **grades are based solely upon my level of performance**, not on what I may want or think I need.
  - i. Students do not get a grade simply by attending.
  - ii. Students must work at achieving their desired grade.
  - iii. Work means putting in significant amounts of study time. Many hours repeatedly going over the material.
  - iv. Goofing off and poor attendance usually means failing the course.
- c. I understand that the final grade I receive in this course is the grade I “**EARNED**”. The instructor does not “**GIVE**” me a grade.
- d. I understand that it is the instructor's responsibility to evaluate my performance and to assign a **grade that certifies the level at which I KNOW and UNDERSTAND the course material**.
- e. I understand that I **earn my grade by demonstrating** on assigned tests, quizzes and assignments that I **KNOW and UNDERSTAND** the course material.
- f. I understand that it is my responsibility to **master ALL course material** to the level necessary to achieve the grade I want in this class.
- g. I understand that the grade I receive is **NOT based** on the amount of work or effort I do. Effort is my responsibility.
- h. I understand that **late assignments will not be accepted** and will summarily receive a grade of zero.
- i. I understand that **incomplete work will not be accepted** and will summarily receive a grade of zero.
- j. I understand that **work that does not follow instructions in all respects will not be accepted** and will summarily receive a grade of zero.
- k. I understand that in the event of a **personal emergency** resulting in missed assignments it is my responsibility to contact the instructor as soon as possible. I also understand that any possible make up work is strictly at the instructor's discretion on a case by case basis.
- l. I understand that it is **my responsibility** to make sure I understand all assignment instructions and due dates. It is not the instructors fault if I fail to meet these expectations.
- m. I understand that my grades are based only upon the assignments given. There are **no** opportunities for “**extra credit**” or “**additional assignments**”.

- n. I understand that it is **my responsibility to seek additional help** from the instructor or campus tutorial services when needed.
- o. I understand that the time to worry about my grades is all **during the term**. Grades are final after the class is over.
- p. I understand that **no late or additional assignments will be accepted** for any reason after the course closes.
- q. I understand that **grades are not negotiable**. Complaining or begging extra points after the fact are not appropriate behaviors.
- r. I understand that my **grade will be based on the criteria** detailed earlier in this syllabus and that it is my responsibility to seek clarification if it is needed.
- s. I understand that this course will assign grades on a **10 point scale and no curve** is to be used in assigning those grades.
- t. I understand that the instructor cannot and will not predict nor promise any grades before all scores for all assignments are done and the class is completed.
- u. I understand that the instructor will only discuss my final grade for purposes of explanation or correction of a possible mistake. Discussions about disappointment with grades, complaints about grades, grade changes or general whining about poor performance will not be entertained.