

BIOL 1108 Principles of Biology II

Lecture Syllabus for Lecture and **Lab Sections A, B and K

**If you are in another lab section your lab professor will have a different lab syllabus

Instructor: Dr. Theresa J. Grove

Office: BC 1099

Office hours: Tuesday and Wednesday 9:30 – 11:30 a.m. (or by appointment or stop by)

Email: tjgrove@valdosta.edu (If you send me an email after 7:00 p.m. I may not respond until the next morning. If you send me an email over the weekend, I will respond within 24 hours. I only infrequently check Blazeview messages and prefer to use my tjgrove@valdosta.edu account.)

Lecture (BC 1023): Tuesday/Thursday 8:00 a.m. – 9:15 a.m.

Lab (BC 1073): Section A Monday 9:00 a.m. – 11:50 a.m.

Section B Monday 1:00 p.m. – 3:50 p.m.

Section K Monday 4:00 p.m. – 7:50 p.m.

Prerequisite: BIOL 1107 (or the equivalent) or permission of the instructor.

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

The primary goal of this course is to introduce structure-function relationships and physiological processes of plants and animals. This is the second introductory course, and it is expected that you are familiar with topics covered in BIOL1107 so that you can build on your foundational knowledge of biology. At the end of the semester you will be able to successfully complete higher level courses.

Learning goals include:

- Increase your understanding of structure-function relationships in biology
- Increase your understanding of the physiology of the major systems in plants and animals including:
 - Structure/function relationships
 - Nutrition
 - Transport
 - Movement
 - Reproduction
 - Development
 - Sensory systems
- Strengthen your ability to critically analyze scientific data and test scientific hypotheses
- Cultivate the linkage of biology with math, physics, and chemistry

Textbooks and Other Items

- Lab Manual (Required), Great River Learning, ISBN 9781680750201, available from the bookstore or publisher at grtep.com
- Sadava et al. Life Textbook and LaunchPad (choose one, Required):
 - a) Launchpad with ebook (ISBN 9781319165444)
 - b) loose-leaf textbook with LaunchPad (ISBN 9781319126193)
 - c) hardback with LaunchPad (ISBN 9781319125714)
- 3-ringed binder or folder (or notebook) for lab exercises and study journal (Optional)

Attendance: Attendance in lecture and lab is required by all students. I determine whether or not an absence is “excused”, and you must provide documentation. If you miss three labs **for any reason** you cannot earn higher than a D for your final course grade. You are responsible for all lab content even if you receive an excused absence. If you do miss a lab (excused or unexcused), while I am more than happy to get out the necessary specimens for you to examine the following week, some specimens may not be available, so do not assume that everything will be there.

Academic conduct: Cheating and plagiarism will not be tolerated and may result in a failing grade for the assignment, exam, or your final grade. The Department of Biology has a plagiarism policy on its website, (insert website) which will be briefly discussed in the first lab period. It is the student's responsibility to make sure they understand this policy.

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 cannot be made. While I do not post grades on Blazeview, I will respond to messages on Blazeview about your grade.

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 is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment and 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, titleix@valdosta.edu, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

Concealed Guns on Campus: If you choose to carry a concealed weapon you are responsible for knowing and following the law. Licensed individuals may carry a handgun if it is mostly covered, does not actively draw the attention of people and is "not prominently, openly and intentionally displayed". While concealed guns are allowed in lecture and lab classrooms, no guns are allowed in faculty, staff and administrative offices and in rooms where Move On When Ready (MOWR) high school students are enrolled (as well as other locations). It is the responsibility of you (the gun-carrier) to determine if there are high school students in the class by checking Banner or contacting the VSU's registrar to determine. It is a misdemeanor to violate this law. If you have any questions concerning this new law, contact University Police (229-333-7861) or the University Attorney (229-333-5351; West Hall 125).

Lecture and Lab Sections A, B, K "Rules"

- Attendance is required.
- Arrive on time.
- Turn off cell phones during lecture; there is no reason you should be texting or calling someone.
- Don't have conversations with your neighbor during lecture; if you don't understand something or didn't hear something ask.
- Emailed assignments generally will not be accepted unless specified.
- No eating or drinking during the lab. There are NO exceptions! If you come to lab with food or drink you will be asked to put it away or out in the hall.
- Students must take care of lab equipment (including microscopes). Notify the professor if something is not working properly or if something breaks during the course of the lab.
- Cell phones are not allowed to be used in lab with the exception of using them to view the online lab manual, cameras or when I approve their use.
- There are no "open" lab periods.
- Bring tissues with you to exams and use the restroom before coming to an exam. I do not allow students to leave the room during an exam.

Blazeview D2L: Take advantage of the resources on BV, which include the following:

- Lecture slides will be available by ~5:00p.m. the day before lecture (if not earlier). I will not email complete notes and slides to you, nor will I let you sit in my office to copy my notes if you miss a class.
- I will be attempting to record lectures and posting them on BV. These recordings are not a substitute for attending lectures, but are meant as a tool to clarify content outside of lecture.
- Handouts and take-home homework from lecture and lab will be posted on BV. Some homework assignments may require that they be turned in through Blazeview or completed on Blazeview and will be clearly marked as such.
- While I will not discuss grades over "regular" email, I will discuss grades in Blazeview. I do not however post assignment, quiz and exam grades in Blazeview; it is your responsibility to keep track of your own grades.

Study Techniques and Help Sessions

- A "How to Study" packet is posted on BV.
- Help/Review Sessions will be held on Tuesday and Wednesday 4:30-5:30 beginning January 16. The room will be announced.

Study Journal: Maintaining a study journal is optional. The purpose of the study journal is: 1) to help assist you in the development of your study skills that you will use throughout your college career and 2) to serve as additional credit. This will be a handwritten (not typed) record of your expectations, goals, study schedules and habits, and self-reflections. To earn credit the study journal is due to my office (room 1099) every Tuesday by 10:00 a.m. (no late journals will be accepted). The journals will be available for pick-up by ~12:00 p.m. the next day (Wednesday). You will earn 2/2, 1/2, and 0/2 points based on the completeness of entries. This is not meant to be busy-work, but should help you develop good study skills if you take this seriously. Use a three-ringed binder or notebook for the study journal. Because this is optional, but is worth points you can only start turning in a study journal for credit at the beginning of a unit, or stop turning in the journal at the end of a unit. I will clarify this in lecture. Below I describe the components:

Components:

1. For page 1 write your a) preconceived ideas about this class, b) your goal(s) and expectations and c) develop a plan on what you will do to reach your goal(s).
2. Make a weekly schedule. You must each week develop a schedule that blocks out time for courses, study, exercise, meals, sleep, parties, job, and whatever else you do during a week (Monday through Sunday). I will post a template on Blazeview, but feel free to modify it so that it works for you. You need to tape this into your notebook (starting with the first day of lecture January 11) so that as the week progresses, you can check-off what you complete and circle items that you skipped.
3. Each day keep track in your journal of when, what, where and how you study for this class. If you find a confusing topic write a note about what is confusing (try to be specific). When you identify confusing areas, you can ask for clarification at the next lecture, see me, or go to the Student Success Center. *As an incentive to take advantage of my help (it can get lonely during office hours) you can earn 2 points back on your 1st exam if you see me to get clarification on a topic before the 1st exam.* Keep track of any "A-ha" moments or any other thoughts about the course content, your study habits.
4. At the end of each week (each Sunday) critically evaluate your schedule, describe any changes to your schedule for the following week, identify scheduling and time management issues (or things that work), and make modifications as necessary, and put the next week's schedule in your journal. Yes, I do realize that the first Sunday you will only be critically analyzing a partial week.
5. Continue study journal for rest of summer following the above steps
6. At the end of the semester you will write a brief self-reflection that answers the following questions: How accurate were your preconceived ideas about the course, your expectations of the course and yourself? Did you reach your goal(s)? What will you continue to do, and what will you do differently in your next biology course? Turn-in this and page 1 together to earn 5 homework points.

Lecture Assignments: Lecture assignments may include take-home, in-class, or on-line assignments. Assignments will be worth variable points depending on the effort involved. In-class active learning activities are designed to increase participation, apply your knowledge, and introduce new concepts. In-class active learning activities will be worth 2-5 points for participating and 0 points if you miss the class. In-class active learning exercises cannot be made up. On-line assignments will open and close automatically; generally no late assignment will be accepted once the item closes; you will be able to complete on-line lecture assignments even if you missed class. I will post take-home assignments on Blazeview, so if you miss a lecture you will still be able to complete the assignment; the due date will still be the same, unless you have contacted me, and I extend the deadline.

Lecture Quizzes: To help you prepare for lecture exams, short quizzes (15 pts; 5 questions, 3 points each) will be given in lecture throughout the semester. These may occur at the beginning, middle and/or end of a lecture and will not be announced. If you arrive late you may have less time to complete the quiz. You will complete approximately 15 quizzes/activities throughout the semester, and the highest 10 will be counted towards your grade. Because I only count your highest 10 grades, a missed quiz (for any reason) cannot be made up. Quizzes may be taken various formats including, but not limited to, closed book, open book, and group quizzes. Quizzes may also have confidence components included with each question. The confidence component is designed for you to think about your mastery of the subject and will ask you if you are "Confident" or "Not Confident" with your answer. Students who are accurate and confident in their knowledge and understanding of the material will earn the most points, and students who are wrong, but think they are right will earn the least amount of points. Essentially, the metacognitive component of the quiz should increase the confidence in students who do know the material, but may not be confident in their understanding, and to help some students who are overly confident in their understanding of the material recognize that they are not as prepared as they think they are. The point values for your answers will be:

- 3 pts: Right answer and confident
- 2 pts: Right answer but not confident
- 1 pt: Wrong answer and not confident
- 0 pts: Wrong answer but confident

LaunchPad for Lecture: Access to LaunchPad is required. In LaunchPad you will have LearningCurve assignments, summative quizzes and other short assignments to complete. These are designed to help you learn content as the semester progresses so that you don't procrastinate and try to cram all the material immediately before the exam. You can use any resources to complete these assignments. Each assignment is worth 5 points, and you earn 5 points for completing the assignment or 0 points for not completing the assignment. Assignments will automatically open and close. Due dates will be posted in the calendar in LaunchPad, and no late assignments will be accepted.

Lecture Exams: A total of 4 "regular" exams and 1 cumulative final exam will be given during the semester (a total of 5 exams), and each exam will be worth 100 points. The final exam is scheduled for Tuesday, May 1 8:00-10:00 a.m., and the dates for the other exams are included in the Lecture Schedule. Note, that these are TENTATIVE; therefore I reserve the right to adjust the dates (or content) of the exams. Any content from take-home and in-class assignments or lecture is fair game for the exams. On each exam there may be a few questions (~5) on "old" material. All exams, including the final, will be multiple choice. No exam grade will be dropped. If you miss an exam, you must notify me within 24 hours of the exam to schedule a time to take the exam. If you miss an exam (for any reason other than a university-related excuse) I can change the format of the exam, which includes essays, short answer, fill in the blank, or oral questions. Generally, no early exams (including the final exam) will be given. During each exam cell phones must be turned off. All bookbags, books, purses etc. must be placed in the front of the classroom; NO EXCEPTIONS. If you do not feel comfortable putting your purse, bag, books, etc. at the front of the room don't bring them with you to class. Earbuds, jackets, hats, and hoods cannot be worn during exams. All hands must remain above the desk at all times during exams. Bring a pencil with you to the exam.

Information about the Lab Manual for Sections A, B, K: The lab manual is an online manual. I will go over how to use this manual during lab. 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. For the

first 4 animal labs (Lab 7, 8, 9, 10), you will be required to bring a printed copy of the lab exercises (2.5 pts) and either a printed copy of the background information or show me your electronic access to the background information (2.5 pts) for a total of 5 homework points. For the rest of the semester you should either bring hard copies or be able to view these documents on your phone, tablet, laptop computer, etc. in lab.

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. 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.

Lab Assignments for Sections A, B, K: Throughout the semester you will complete the following types of assignments. Online pre-lab assignments will be due at the start of the lab period. Pre-lab assignments will be worth 0 or 2 points (0 points if not completed and 2 points if completed). In-class assignments will be described at the start of lab and will be due at the end of lab. Online post-lab assignments through the lab manual will usually be due at the start of the next lab period the following week. Data analysis for a lab will be discussed during the lab you collect data and will be due usually 1 week later. Everyone must do their own graphs, although you can talk about data analysis with other students. In-class and post-lab assignments will be worth variable points. No late assignments (unless I approve an exception) and no emailed assignments will be accepted. Do not assume that you will have time immediately before lab to print assignments or finish online assignments; nonfunctional printers, no paper, slow internet etc. are not acceptable reasons for why you did not complete an assignment. It is good practice to plan ahead and have assignments completed and/or printed the day before your lab.

Lab Quizzes for Sections A, B, K: To help prepare you for lab practicals, short PowerPoint quizzes (15 - 20 pts each) will be given at the beginning of lab each week and will cover the previous week's lab content. Quizzes cannot be made-up, and if you arrive late you may have less time to complete the quiz or you may miss the quiz entirely. All lab quizzes will count in your final grade; expect a lab quiz each lab period at the start of lab.

Lab Practical for Sections A, B, K: Two lab practicals (50 points each) will be given, one covering plants and one covering animals. Anything that the student examined or studied in the lab is fair game for a lab practical. The lab practicals will be timed and will be a Powerpoint Presentation. You must notify me within 24 hours of missing a lab practical to schedule a make-up time. More information will be given in lab.

Grade Scale:

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

Final Course Grade: Your final grade in BIOL1108 will be based on both lecture and lab components. I do not post grades in Blazeview. You should keep track of your grades so you will be able to calculate your own grade, but you can also come to my office hours to ask. Below is how your grade will be calculated:

Lab Grade (only for Grove's lab sections A, B, K. If you are not in Grove's lab section you must talk with the professor who is teaching your lab section):

- *Lab Homework (component 1):* Add up all lab homework grades (includes prelabs, postlabs, graphing, and any other homework grades), divide by the total points possible. Multiply by 100 to get a percentage. Multiply this percentage by 0.50 (which is 50%).
- *Lab Quizzes (component 2):* Add up all quiz grades and then divide by the total points possible. Multiply by 100 to get a percentage. Multiply this percentage by 0.10 (which is 10%).
- *Lab Practical (component 3):* Each practical will be worth 50 points. Add up your practical grades and divide by the total possible points (100 points). Multiply by 100 to get a percentage. Multiply this percentage by 0.40 (which is 40%)
- *Lab Grade:* Add Component 1 + Component 2 + Component 3

Lecture Grade:

- *Lecture Homework (component 1)*: Add up all lecture homework grades (includes study journal, in-class and take-home assignments, LaunchPad and Learning Curve assignments, and any other lecture homework), divide by the total points possible. Multiply by 100 to get a percentage. Multiply this percentage by 0.25 (25%).
- *Lecture Quizzes (component 2)*: Add up quiz grades and then divide by the total points possible. Multiply by 100 to get a percentage. Multiply this percentage by 0.10 (10%).
- *Lecture Exams (component 3)*: Add up all lecture exam grades and then divide by the total points possible. Multiply by 100 to get a percentage. Multiply this percentage by 0.65 (65%).
- *Lecture Grade*: Add Lecture Component 1 + Component 2 + Component 3

Final Grade:

- Now (finally), because your lab grade makes up 25% of your total course grade, multiply your lab grade by 0.25. Because your lecture grade makes up 75% of your total course grade, multiply your lecture grade by 0.75. Add these two numbers together; this is your final percentage.

Spring 2018 TENTATIVE LECTURE SCHEDULE

January

- 9 **No Lecture**: Assignment: read the syllabus. There will be a syllabus quiz covering the lecture on Thursday, January 11 at the start of lecture.

Unit 1

- 11 Introduction to Phylogenetic Trees and Diversity of Life
Chapter 39: Physiology, Homeostasis, and Temperature Regulation
- 16 Chapter 39 (cont'd)
Chapter 40: Animal Hormones
- 18 Chapter 42: Animal Reproduction
- 23 Chapter 42 (cont'd)
Chapter 44: Neurons, Glia, and Nervous Systems
- 25 **No lecture**: A video and assignment will be posted on BV covering Chapter 45: Sensory Systems
- 30 Chapter 44 (cont'd)

February

- 1 Chapter 46: The Mammalian Nervous System
- 6 **Exam 1**

Unit 2

- 8 Chapter 47: Musculoskeletal Systems
- 13 Chapter 48: Gas Exchange
- 15 Chapter 49: Circulatory Systems
- 20 Chapter 50: Nutrition, Digestion, and Absorption
- 22 Chapter 51: Salt and Water Balance and Nitrogen Excretion
- 27 Catchup and Review

March

- 1 **Exam 2**

Unit 3

- 6 Chapter 27: Plants without Seeds
- 8 Chapter 28: The Evolution of Seed Plants
- 13 Spring Break
- 15 Spring Break
- 20 Chapter 33: The Plant Body
- 22 Chapter 33 (cont'd)
Chapter 34: Transport in Plants
- 27 Chapter 34 (cont'd)
- 29 Catchup and Review

April

- 3 **Exam 3**

Unit 4

- 5 Chapter 35: Plant Nutrition
- 10 Chapter 36: Regulation of Plant Growth
- 12 Chapter 36 (cont'd)
Chapter 37: Reproduction in Flowering Plants
- 17 Chapter 37 (cont'd)
- 19 Chapter 38: Plant Responses to Environmental Challenges
- 24 **Exam 4** (this exam may get pushed back to April 26)
- 26 Review for Final

Spring 2018 Lab Schedule for Sections A, B, and K

| Lab | Date | ¹ Online Pre-lab open – close dates | ¹ Online Post-lab open – close dates |
|---|--------|---|--|
| Intro to Statistics (Lab 1): Meet in computer lab Bailey Science Center Room 3018 | Jan 8 | None | None |
| MLK Holiday (no lab) | Jan 15 | | |
| Diversity Part I (Lab 7) | Jan 22 | Jan 8 – Jan 22 | Jan 22 – Jan 29 |
| Diversity Part II (Lab 8) | Jan 29 | Jan 22 – Jan 29 | Jan 29 – Feb 5 |
| Animal Tissues (Lab 9) | Feb 5 | Jan 29 – Feb 5 | Feb 5 – Feb 12 |
| Fetal Pig Anatomy (Lab 10) | Feb 12 | Feb 5 – Feb 12 | Feb 12 – Feb 19 |
| Sensory System (Lab 11) | Feb 19 | Feb 12 – Feb 19 | Feb 19 – Feb 26 |
| Cardiovascular System (Lab 12) Excretory System (Lab 13) | Feb 26 | Feb 19 – Feb 26 | Feb 26 – Mar 5 |
| <i>Animal Practical</i> | Mar 5 | | |
| <i>Spring Break: No Lab</i> | Mar 12 | | |
| Nonvascular Plants (Lab 2) | Mar 19 | Mar 5 – Mar 19 | Mar 19 – Mar 26 |
| Vascular Plants (Lab 3) | Mar 26 | Mar 19 – Mar 26 | Mar 26 – Apr 2 |
| Plant Cells, Organs and Growth (Lab 4) | Apr 2 | Mar 26 – Apr 2 | Apr 2 – Apr 9 |
| Angiosperm Development (Lab 5) | Apr 9 | Apr 2 – Apr 9 | Apr 9 – Apr 16 |
| Growth and Transpiration (Lab 6) | Apr 16 | Apr 9 – Apr 16 | Apr 16 – Apr 23 |
| <i>Plant Practical</i> | Apr 23 | | |

¹Lab assignments will open and close on the dates at the same time your lab section starts