

BIOL 1108 Principles of Biology II Syllabus (Fall 2022)

“...Physiology is indeed an explanation of life. What other subject matter is more exciting, more beautiful than the subject of Life?” --Dr. Arthur Guyton, MD (1919-2003)

Instructor: Dr. Theresa J. Grove

Office: BC 1036 (in the CoSM Dean's Suite)

Student Hours: Currently scheduled for: Monday 4:00-6:00, Wednesday 3:00-4:00, and Thursday 2:00-4:00 (or by appointment). As the semester progresses, it's possible that I will have to change these times to better accommodate students or if something changes in my schedule. If these times are changed I will announce new hours in class and post on BV. Student hours are in person, however, if you need to meet online, I can schedule Teams meetings outside of these regular hours.

Email: tjgrove@valdosta.edu (After 6 p.m. I may not respond until the next morning. If you send me an email over the weekend, I may not respond until Monday morning. I only infrequently check Blazeview messages (~ 1x/week), so please use my tjgrove@valdosta.edu account.

Office Phone: 229-333-5336

Announcements: I routinely post announcements on BV about due dates, homework, etc.

Lecture (BC 1023): Tuesday/Thursday 9:30 a.m. – 10:45 a.m.

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

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

What does this mean? Physiology explains how organisms work and how they respond (biologically) to their environment.

Why study physiology (or take BIOL1108)? Understanding physiology will help you...

- 1) ...understand your physiological self (or those you care about).
- 2) ... understand your pet's or plant's physiological self.
- 3) ... prepare for careers in medicine and other biological fields (PT, nursing, exercise physiology, grad school, researcher, vet medicine, medical school, etc.)
- 4) ... understand your food supply, your environment, basically the entire world around you.
- 5) ... build foundational knowledge for higher level courses

Overarching Goal for 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.

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 understand science and critically evaluate science in the news
- Cultivate the linkage of biology with math, physics, and chemistry

Textbook

- Any Introductory Biology textbook will work. However, the syllabus and organization of lectures is based on OpenStax Biology 2e (<https://openstax.org/details/books/biology-2e>), which is free.

Attendance: Attendance in lecture is expected by all students.

COVID and other Illnesses: If you are sick don't come to class. Follow university policy regarding COVID (<https://www.valdosta.edu/campus-operations/>). If you have any questions, don't hesitate to ask.

Support, Engagement and Success

- I want you to succeed and I will work with you and support you to help you learn the material. Come to my office, ask questions in class, or set-up additional appointments with me.
- However, to learn the material, you must also engage with the course content. Cramming a few days before the exam (or even a week before the exam) is not a good habit. You should go over the material (new and old) each week. Being a full-time student is a full-time job.
- You must be able to evaluate your own actions/study habits and be willing to change how you study. If you don't know what to do, see me or check out the Academic Support Center (ASC).
- There are lots of resources on campus; ASC has tutors available (<https://www.valdosta.edu/asc/find-your-pal-facilitator.php>).
- GUIDES peer mentors will also be available to help you out. More information will be announced next week.
- I've posted a Study Tips handout in BlazeView.
- Get organized...have an academic planner or calendar to keep track of due dates.

Fall 2022 TENTATIVE LECTURE SCHEDULE

(Note that this is a tentative schedule so topics and dates covered may change) It is possible that I may have to cancel a class because of a VState Experience. If this is the case, I will post a recorded lecture for you to watch or some other assignment for you to complete.

August

- 16 Intro to BIOL1108, Tree of Life, & Physiology
- 18 Plant Diversity and Chapter 25: Seedless Plants (25.1, 25.3, 25.4)
- 23 Chapter 26: Seed Plants (26.1, 26.2, 26.3, 26.4)
- 25 Chapter 32: Plant Reproduction (32.1, 32.2, 32.3)
- 30 Alternation of Generations Recap and Cell Structure Review

September

- 1 Chapter 30: Plant Body (30.1)
- 6 **Exam 1**
- 8 Chapter 30: Stems, Roots, Leaves (30.2, 30.3, 30.4)
- 13 Chapter 30: Transport of Water & Solutes in Plants (30.5)
- 15 Chapter 30: Transport of Water & Solutes in Plants (30.5)
- 20 Cell Signaling Review and Chapter 30: Plant Sensory Systems & Responses (30.6)
- 22 Chapter 30: Plant Sensory Systems & Responses (30.6) continued and Chapter 31: Nutrition & Soil (31.1, 31.2)
- 27 Chapter 31: Nutritional Adaptations (31.3)
- 29 **Exam 2**

October

- 4 Chapter 27: Introduction to Animal Diversity (a brief overview from 27.1, 27.2, 27.3, 27.4); Chapter 33: The Animal Body (33.1, 33.2, 33.3)
- 6 Chapter 35: The Nervous System (35.1, 35.2)
- 11 Fall Break (October 10-11)
- 13 Chapter 35: The Nervous System (35.3, 35.4, 35.5)
- 18 Chapter 36: Sensory Systems (36.1, 36.2, 36.3, 36.4, 36.5)
- 20 Chapter 36: Sensory Systems (cont'd) and Chapter 37: The Endocrine System (37.1, 37.2, 37.3, 37.4, 37.5)
- 25 **Exam 3**
- 27 Chapter 37: The Endocrine System (cont'd)

November

- 1 Chapter 38: Musculoskeletal System (38.1, 38.2, 38.3, 38.4)
- 3 Chapter 38: Musculoskeletal System (cont'd) and Chapter 39: The Respiratory System (39.1, 39.2, 39.3, 39.4)
- 8 Chapter 39: The Respiratory System (cont'd) and Chapter 40: The Circulatory System (40.1, 40.2, 40.3, 40.4)
- 10 Chapter 40: The Circulatory System (cont'd)
- 15 Chapter 41: Osmotic Regulation & Excretion (41.1, 41.2, 41.3, 41.4, 41.5)
- 17 Chapter 43: Animal Reproduction & Development (43.1, 43.2, 43.3, 43.4, 43.5, 43.6, 43.7)
- 22 **Exam 4 (Note: that this is the Tuesday before break)**
- 24 Thanksgiving break (November 23-25)
- 29 Review for final

December

- 1 Review for final

Final Exam: Thursday, December 8 8am-10am; no early exams will be given.

Midterm: Midterm is October 6, and October 13 is the withdrawal deadline.

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

- Check BV for course announcements.
- Lecture slides will be available by ~5:00p.m. the day before lecture (if not earlier).
- I will record lectures and post them on BV. These recordings are not a substitute for attending lectures, but are meant as a tool to clarify content outside of lecture. If there are technology issues, the lecture recording will not be available.
- Grades will be posted in BV. If you have any questions about your grade, see me.

How You Earn Your Grade

To calculate your grade, add up the points that you earn and divide by the total points possible. Multiply this number by 100% to get a percentage. I reserve the right to curve (or not curve) the final course grade (or any exam grade) at the end of the semester. The grading scale is below.

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

- **Lecture Exams (400 points total after lowest exam grade is dropped):** A total of four (4) 'regular' exams and one (1) cumulative final exam will be given during the semester (a total of five exams), and each exam will be worth 100 points and will be multiple choice. No online exams will be given. The lowest exam grade out of the five exams will be dropped, which means that the final is optional. If you miss an exam you must contact me within 24 hours in order to makeup an exam; this makeup exam may have different questions. If you do not contact me within 24 hours, then this is the exam that will be dropped. Except under extenuating circumstances with evidence from doctors, students must setup a time to retake the exam within 5 business days of returning to class.

Any content from lecture, assignments and quizzes is fair game for an exam. 'Regular' exams will have ~55-70 multiple choice questions; the final will have ~110 multiple choice questions. On each exam there may be a few questions (5-10) on "old" material. All exams will be completed during class. Students will not be allowed to leave during an exam.

All exams are closed book. Communicating with other living humans, using a cell phone or any other item to look at information covered on an exam during an exam is considered cheating. If caught, you will earn a zero for this exam, and this zero will be calculated in your final grade (it can't be your dropped exam).

- **BlazeView (BV) Online Quizzes (~100 points total):** To help you prepare for lecture exams, multiple choice quizzes with 5-10 questions will be given throughout the semester. You will complete these quizzes 2 times, and both scores will count towards your total points earned. Why take the quiz two times?
 - Purpose of the 1st attempt: to figure out the answers
 - Purpose of the 2nd attempt: to practice recall of the information

BV Quiz Grading Explained: For the first attempt, each question is worth 1 point, and for the second attempt each question is worth 0.25 points. Based on these point values, each quiz (combined 1st and 2nd attempts) will be worth 10-20 points.

BV Quiz Logistics: The **1st attempt** will be open book and will not be timed (you have all the time you need to figure out the answers) and will open on Sunday at 11:59pm and close (be unavailable) on Thursday at 11:59pm (4 days to complete). Each question will be worth 1 point. The **2nd attempt** will be timed (1 minute/question), and while it will be considered open book, you should study content prior to taking the quiz. The 2nd attempt will open on Thursday at 11:59pm and will close Sunday at 11:59pm (become unavailable). Each question will be worth 0.25 points.

These quizzes will be completed on BV. There will be no quizzes during the first week of class (August 15-19), but all of these quizzes combined will be worth a total of ~100 points. All BV quizzes will count towards your grade (there will be no dropped quizzes).

Each student will be given 5 opportunities to re-open the 1st attempt at a quiz. To do this, you must send me an email to tjgrove@valdosta.edu within a week of the due date for that particular quiz, give me the quiz number (e.g. Quiz 1), and ask me to re-open it. No questions will be asked. The 2nd attempt timed quizzes will not be reopened.

- **Lecture Assignments (~50 points):** Lecture assignments may include take-home, in-class, or online assignments. Assignments will be worth variable points. Online assignments will open and close automatically; generally, no late assignment will be accepted once the due date passes without an approved excuse (Dr. Grove determines whether or not an absence is excused).
- **Lecture Quizzes (~100 points):** To help you prepare for lecture exams, short quizzes (10 pts: 5 questions, 2 points each) will be given in lecture throughout the semester. These may occur at the beginning, middle and/or end of a lecture and usually will not be announced. If you arrive late you may have less time to complete the quiz (or you may miss it completely). Approximately 15 quizzes will be given throughout the semester, and the highest 10 will be counted towards your grade. Because I only count your highest 10 grades, a missed quiz cannot be made up. Please do not think that there are plenty of chances to miss quizzes for unexcused reasons (didn't feel like attending class, overslept, etc.) because if you miss 5 quizzes because of not-so-good choices, and then have to have a legitimate reason (excused illness, university function, etc.), you will still not be able to make up the quiz.

Lecture quizzes may have 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: 2 pts: Right answer and confident, 1 pts: Right answer but not confident, 0.5 pt: Wrong answer and not confident, 0 pts: Wrong answer but confident

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, (<https://www.valdosta.edu/biology/resources.php>); it is the student's responsibility to make sure they understand this policy. It is your responsibility to read and understand the directions of all assignments, quizzes, and exams. If you have any questions ask before the due date.

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, but I do post grades in BlazeView.

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 (previously located in Farbar Hall) has moved to The University Center (Entrance 5, Room 4136). 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.

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