



**BIO 1110 LAB, Section 301: Anatomy and Physiology i**  
**SYLLABUS**  
Term: Fall 2018

Rhodes State College  
Division of Arts and Sciences  
Department of Physical and Biological Sciences

0 Credit Hours  
2 Contact Hours  
3 hours of lecture/week, 2 hours of lab/week

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E- Portfolio: N  
TAG: N  
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**Mission Statement:** Rhodes State College changes lives, builds futures and improves communities through life-long learning.

Program/Department Mission or Purpose Statement:  
Physical and Biological Sciences facilitates understanding of the structure and function of the natural world.

## **OVERVIEW**

### Catalog Description:

Studies the structure and function of the human body as an integral whole. The course begins with a brief study of inorganic chemistry, organic chemistry, and histology, then examines the following body systems: integumentary, skeletal, muscular and nervous. Laboratories include dissections, physiology experiments and plastic model demonstrations. "C" grade policy applies for a student in a health program.

### Prerequisites:

BIO 0900 with "C" or better, or placement

### Corequisites:

BIO 1110

### Lecture and Class:

3 hours lecture and 2 hours lab/week

Summer 2017

Course Delivery:  
Traditional

## TEXTS AND MATERIALS/SUPPLIES

- *Required: Exploring Anatomy & Physiology in the Laboratory, 3e*  
ISBN: 9781617316203

## LAB STUDENT LEARNING OUTCOMES

- Use anatomical directional terms accurately to describe the locations of body structures.
- Recall the anatomy and physiology of organelles in a general cell.
- Compare the processes of mitosis and meiosis.
- Identify the twelve assigned types of body tissues, and be able to recognize them on organ slides.
- Identify the layers and structures of the integumentary system.
- Identify the bones and bony landmarks assigned.
- Locate the assigned muscles of the muscular system on torso and limb models.
- Differentiate among neurons and neuroglia.
- Identify structural and functional classifications of neurons.
- Identify the parts of a multipolar neuron.
- Identify assigned lobes, fissures, gyri, sulci of brain. Identify assigned structures of diencephalon and brainstem. Explain basic functions of all these.
- Describe the structures that protect the central nervous system.
- Identify gross anatomical regions of spinal cord.
- Identify structures on spinal cord cross-section and their functions.
- Recall the anatomy and physiology of olfaction, gustation, vision, and hearing.
- Perform experiments in which variables are manipulated and the results analyzed.
- Effectively communicate the experimentation and results.

## **SCHEDULE OF LAB ACTIVITIES: This is the sequence, but pacing may vary.**

TOPIC (Exercise #)	Activities
Safety training Language of Anatomy (1) Organ Systems Overview (2)	<b>Activities:</b> Practice anatomical terms and directions. Locate the organs in the 9 regions using a model; view body cavities using the cadaver.
Microscope (Appendix A, p.367) The Cell—Anatomy and Division (3)	<b>Activities:</b> Using the microscope. Practice by viewing onion root tip mitosis slides and look for all phases.
The Cell—Transport Mechanisms (4)	<b>Activities:</b> Diffusion of ions through a selectively permeable membrane using the LabQuest.
<b>Exercises 1-4 Test</b>	<b>ALL fill-in practical test</b>
Classification of Tissues (5)	<b>Activities:</b> view tissues on pictures and slides.
Integumentary System (6)	<b>Activities:</b> Use your lab book to find the structures you need to know on models.
<i>Skin Temperature Experiment</i>	Data collection and analysis: Skin temperature regulation experiment, LabQuest
<b>Exercises 5 &amp; 6 Test</b>	<b>ALL fill-in practical test</b>

Overview of the Skeleton (7) The Axial Skeleton (8)	<b>Activity:</b> use the skeletons and disarticulated bones to find all of the parts you need to know.
The Appendicular Skeleton (9)	<b>Activity:</b> use the skeletons and disarticulated bones to find all of the parts you need to know.
<b>Exercises 7 – 9 Test</b>	<b>ALL fill-in practical test</b>
Gross Anatomy of the Muscular System (12)	<b>Activity:</b> use the muscle models (arms, legs, eyes) to find the muscles you need to know. [eye muscles may be done here or in special senses]
<i>Muscle Physiology Experiments (the experiments will take the whole lab—do not be late!)</i>	<b>Exp. 1:</b> Grip strength comparison of right and left arm, and between genders. <b>Exp. 2:</b> Grip strength and muscle fatigue. Both use the LabQuest.
Neuron A & P (13)	<b>Activity:</b> Label diagrams of structural and functional classes of neurons, label diagram of multipolar neuron
Brain and Cranial Nerves (14)	Use the models and diagrams to locate the parts you have to know. Observe a sheep brain dissection to find the parts you have to know
<b>Exercise 12-14 Test</b>	<b>ALL fill-in practical test</b>
Spinal Cord & Nerves (15) Reflexes (16) <i>(may omit 16)</i>	<b>Activity:</b> Label diagram of cross section of spinal cord Use the models to locate the parts you have to know
Special Senses (17)	<b>Activity:</b> use the models to locate the parts you have to know. Do a cow eye dissection to find the parts you have to know.
<b>Exercises 15-17 Test</b>	<b>ALL fill-in practical test</b>

### LABORATORIES, CLINICALS, FIELD WORK/ SPECIAL REQUIREMENTS:

Lecture and lab are separate classes on campus that have a joint grade. Labs are worth 30% of the total course grade. Lab grades are combined with lecture grades to determine your course grade. There is not a separate lab grade.

### TESTING AND EVALUATION:

1. **Laboratory Exams:** There will be five lab exams. **Word banks are not provided**, and spelling counts. Practice writing the terms! There will be quizzes in lab to prepare you for these tests.
2. **Laboratory Reports:** There will be lab write-ups for in-class projects, each worth 10 points. *If you are not present for an experiment, you cannot turn in a lab write-up and forfeit the points!*
3. **Missed Exams and/or in class assignments:**  
No student should miss an exam. **Excused absences** occur in case of extreme difficulties and include: documented death/funeral of immediate family member, ER visit/hospitalization, and/or mandatory court appearance. **Unexcused absences** include the following examples: sick child/parent/spouse/pet/other, planned vacations, oversleeping, car trouble, kind of sick but no doctor's note, kidnapped by aliens (unless documented by MIB). In either situation, email your instructor within 24 hours of missing an exam. For excused absences, provide scanned copies of supporting documentation (medical/legal). If you do not provide excusable evidence, it is still your responsibility to contact the instructor and to schedule a makeup exam date and time as stated above. If a makeup is approved, the test must be taken within one week. Unexcused absences will incur a 15% reduction of your test score. Make-ups are practicals and must be taken in the lab. We will have to arrange a time to set it

up. It will be an altered version of the in-class exam. Final exams cannot be made up except in the case of an excused absence. Physiology labs and quizzes may not be made even in the case of an excused absence. However, a replacement lab and quiz will be offered at a 15% reduction in score if the absence is unexcused or full value if the absence is excused. The replacement lab and quiz may be taken by *any* student. These replacement assignments will replace the lowest score.

Practical Exams:	100 pts each
In-class quizzes	10 pts each
<u>Experiment write-ups</u>	<u>50 pts each</u>

340pts

<b><u>GRADING SCALE</u></b>	<b><u>Percent %</u></b>	<b><u>Letter Grade</u></b>
	94.5-100	A
	91.5-94.4	A-
	88.5-91.4	B+
	85.5-88.4	B
	82.5-85.4	B-
	79.5-82.4	C+
	<u>76.5-79.4</u>	<u>C</u>
	73.5-76.4	C-
	68.5-73.4	D+
	64.5-68.4	D
	<64.5	E

### **INSTRUCTOR**

**Cell phone use:** Cell phones must be turned OFF and PUT AWAY during class. If cell phones are disruptive, I will confiscate them until the end of class. If you have a legitimate reason for keeping your cell phone on, NOTIFY ME and keep it on vibrate. NO calls TEXTING, OR PHOTOS during class.

**Disruptive behavior:** Students are expected to conduct themselves in a mature, responsible manner. Disruptive behavior, private conversations during class, and disrespectful remarks toward others will not be tolerated. You may be removed from class, and I will call Security if necessary.

**This syllabus can be changed at the discretion of the lead instructor or chair of the program with advance notice.**

## INSTITUTIONAL INFORMATION

**Rhodes State College is a tobacco-free campus.**



### **Student E-mail:**

Students are expected to check their e-mail on a frequent and consistent basis in order to stay current with college- and course- related communications. Students have the responsibility to recognize that certain communications may be time-critical. "I didn't check my e-mail," error in forwarding mail, or e-mail returned to the college with "Mailbox Full" or "User Unknown" is not an acceptable excuse for missing official College communications via e-mail. RSC recommends checking email once a week at a minimum in recognition that certain communications may be time-critical.

Students are expected to use proper etiquette when submitting emails to College personnel. When sending emails, the College expects students to exhibit the same professionalism and respect to College faculty and staff as you would in person; use a positive tone and use correct spelling and grammar before sending the email.

### **Attendance**

Regular attendance is needed to gain an understanding of the course's content and to satisfactorily demonstrate required competencies. Lack of attendance will negatively impact the earned grade and if flagrant, could result in a grade of "E" which may negatively impact a student's financial aid eligibility. (See Federal Student Aid Handbook for further information.)

### **Withdrawal**

A student who registers for classes, but who decides not to attend the College must officially withdraw from the College dropping their classes. Failure to officially withdraw will result in the student being awarded grades of "E" in all courses, and the student being required to pay all assessed fees even though the student has actually left the College.

Students are responsible to officially drop/withdraw from all courses which they are registered when they decide to no longer attend. If a student does not initiate an official drop/withdraw within the Office of Advising, the institution has the right to identify a date of drop/withdraw. Students identified as not attending will be withdrawn failing "WF" by the college beginning the 6<sup>th</sup> week of the semester. (Federal Student Aid Handbook, Vol. 4, Ch 3). Students will be notified of the action by U.S. mail. If attendance is a required element of the course and this is stated in the course materials, lack of attendance may result in a grade of "E" rather than "WF."

### **Incomplete**

An "I" indicates that the work of the student in the course is qualitatively satisfactory, but that for legitimate reasons a small fraction remains to be completed; or that the record of the student in the course justifies the expectation that he or she will obtain a passing grade, but he or she has been unavoidably absent from the final examination.

The grade "I" shall be temporarily recorded on the student's grade report. The student must complete the work and the instructor must report the final grade at the earliest possible time, but not later than the sixth Friday following the first day of the semester subsequent to the one in which the "I" was received (not counting summer term). Upon the request of the student to the instructor, within the six week period, the Vice President for Academic Affairs may for good reason allow a student additional time in

which to complete the work. Generally, this shall not be longer than the end of the semester following the semester in which the “I” was received. As soon as the incomplete work has been made up, the instructor, or in the case of his or her absence from the College, the Dean, shall ensure the proper grade is entered on the student’s record.

Until such time as the final grade is recorded, the credit hours in the incomplete courses shall not be counted or considered for any purpose. In no case shall a student who has received the grade “I” be permitted to repeat the course in which such grade was received until such time as the “I” has been removed. If the student fails to complete the coursework, the final grade will be determined by giving the student a zero on all remaining and unfinished work. These zeros will be used to calculate the final course grade. Students who are unsuccessful in a required competency (as defined in the syllabus) will receive an “E/U” grade. Note: A student’s Financial Aid Status and/or Academic Standing will be affected by the Incomplete.

### **College Closures:**

Please sign up for **Rhodes Alert** which can be found on the Rhodes State College website. Rhodes Alert was created to provide students with Emergency Notifications in the event of Weather Emergencies, Weather Closures, and Campus Security Threats. These notifications will be delivered via phone, email, and text message. The local TV and radio stations also post information about College closures.

### **Weather Delays and Cancellations:**

In the event that weather forces a delay to the start of the academic day, the College will announce when classes will begin. Classes starting and ending prior to the announced start time are cancelled. If the class starts before the announced start time but still has more than 30 minutes of class remaining after the start time, that class will begin at the announced specific time and end at its normal time.

*For example, if the College delays until 10:00 a.m., a class starting at 8:00 a.m. and ending at 10:20 a.m. would be canceled for that day. If, however, a class begins at 9:30 a.m. and has an ending time of 11:00 a.m., it would be held from 10:00 a.m. to 11:00 a.m. that day.*

This same 30 minute rule will be used in the event of an early closure of the College. The portion of the class which was scheduled prior to the announced closure time would be canceled if the start time is 30 minutes or less before the closure time.

*For example, if the College announces a 6:00 p.m. closing time, classes that begin at 5:30 p.m. would be canceled. If a class is scheduled to begin at 5:00 p.m. on that same day and had a 7:30 p.m. end time, the class would run from 5:00 p.m. to 6:00 p.m. on that day.*

Because student travel to clinical/practicum experiences may begin at an early hour, program leadership may delay the start to enable the College to assess weather conditions and allow for the College’s communication process to occur.

When the College does not issue an official delay or cancellation, students are expected to exercise their mature judgment in determining whether to attend classes or activities sanctioned by Rhodes State College. In accordance with procedures established by each individual faculty member, students are accountable for any material missed during an absence without an official delay or announced cancellation. In all cases, students are expected to pursue, by their own self-directed efforts, the course content, activities, and assignments for which they are responsible during the period of absence.

### **Emergency Procedures:**

**Students are responsible for following appropriate campus emergency procedures.** Students are encouraged to review the Building Emergency Action Plan on the college website:

(<http://www.rhodesstate.edu/About%20Rhodes/College%20Offices%20and%20Departments/Security-Safety/Emergency%20Information.aspx>)

### **Student Resources:**

Testing Center: TL132, 419-995-8476

Advising: PS 148, 419-995-8400

Campus Security: TL150, 419-995-8499

Financial Aid: PS 150, 419-995-8800

Library – Cook Hall, 419-995-8326

Career Services: PS 150, 419-995-8352

Accommodative Services: TL 132, 419-995-8009

Computer Help Desk: KH 102, next to the open computer lab, 419-995-8069

#### **Tutoring:**

Academic Success Center: SCI 151/SCI 240, 419-995-8039

### **FEELING OVERWHELMED AND NEED HELP?**

If you need help, call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255), available 24 hours a day, 7 days a week, or text “START” to 741-741. This helpline is not just for people who are thinking about suicide. It is also for anyone who is depressed, despairing, going through a hard time, or just needs to talk. Any life issues may be discussed. Two other resources include the Suicide Help Hotline at 1-800-4673 and the Crisis Hope line at 1-888-567-HOPE.



**ADA Reasonable Accommodations:** Accommodative Services supports all students with documented disabilities who are enrolled for credit. Students who have documented disabilities and feel they would benefit from accommodations at Rhodes State should contact Accommodative Services in person in the Technical Education Laboratory building, Room 132 (TL 132), via email at [AccommodativeService@RhodesState.edu](mailto:AccommodativeService@RhodesState.edu), or via telephone at 419-995-8009. Students must meet with Accommodative Services, receive an Accommodations Letter, and present the letter to the instructor **before accommodations take effect. Accommodations are not retroactive.**

**Plagiarism:** Plagiarism is defined (As per Rhodes State Student Code of Conduct), as “The unacknowledged use (intentional or unintentional), by paraphrase or direct quotation, of the published or unpublished work of another person or agency engaged in the selling of term papers or other academic materials. Acknowledgement must be in accordance with course guidelines, and documentation must occur whenever a student uses direct quotations; copies a table, chart, or diagram; constructs a table from data provided by others; paraphrases a passage; summarizes a passage; presents specific examples, figures, or factual information from a specific source and uses it to explain or support his/her judgments. Plagiarism covers the use of print, electronic, filmed, and broadcast material.” Students are encouraged to review the Code of Student Conduct on the college website (<http://www.rhodesstate.edu/currentstudents>) for examples of academic dishonesty.

**Submitting Substantially The Same Work.** Submitting substantially the same work to satisfy requirements for one course that has been previously submitted and satisfied the requirements for another course, without permission of the instructor for which the work is being submitted and without including the original work for comparison is not permitted. See Section 10.5, paragraph 5 of the Code of Student Conduct.

**Academic Honesty** All class members are assumed to be honest. Attempting to deceive, defraud, or use dishonesty for one's own gain will not be tolerated in any form. Cheating during any class activity is unethical and compromises the integrity of the college and subverts the process of education (note: individual programs may impose greater penalties). Cheating may result in a grade of "zero" for the activity. Instructors may submit questionable behavior to the office of the Vice President for Academic Affairs who will bring the incident to the attention of the Academic Integrity Council. Students are encouraged to review the Code of Student Conduct on the college website (<http://www.rhodesstate.edu/currentstudents>) for examples of academic dishonesty.