

# BIO 1110, Section 301: Anatomy and Physiology I **SYLLABUS**

Term: Fall 2018

Rhodes State College 4 Credit Hours Division of Arts and Sciences **5 Contact Hours** Department of Physical and Biological Sciences 3 hours of lecture/week

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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:

Examines the structure and function of the human body. The course begins with a brief study of chemistry, the eukaryotic cell, and tissues, then examines the following body systems: integumentary, skeletal, muscular, and nervous. All students enrolled in BIO-1110 must also sign up for a section of BIO-1110 lab. Laboratories include dissections, physiology experiments, and model demonstrations. A "C" grade policy applies for students in a health science program.

Transfer: TM

Prerequisites/Co-requisites:

BIO-0900 with a "C" or better or placement

Meeting Dates and Times: 8:00-8:45am MTWF 8:00-8:30am R Science and Tech wing ST4 Aug 15, 2018 – Dec 21, 2018

Course Delivery:

**Traditional** 

## **TEXT AND MATERIALS/SUPPLIES:**

- Required: Anatomy and Physiology, 6th Ed., Marieb & Hoehn. E-text with Mastering A&P access code. ISBN: 9780134285467
- Required: Internet access
- Optional: Anatomy and Physiology, 6th Ed., Marieb & Hoehn. This textbook (same as the etext) is also available at the bookstore for those that want to have a hard copy.

#### STUDENT LEARNING OUTCOMES:

Use correct anatomical terminology.

Explain the basic concept of homeostasis and demonstrate how this key concept is the most important unifying theme of the body systems.

Describe the chemical and physical principles that are of particular importance in anatomy and physiology.

Identify the anatomy (gross and microscopic) and explain the basic physiology, of the following: Integumentary System

Skeletal System

Muscular System

Nervous System

## SCHEDULE OF INSTRUCTIONAL ACTIVITIES:

# This is a tentative schedule. If we finish what is scheduled, we will move on to the next class's material. Be prepared.

15-Aug Syllabus, Syllabus Quiz, Books, INTRO TO MASTERING

16-Aug An Overview of Anatomy and Physiology, Levels of Structural Organization

17-Aug Maintaining Life Homeostasis, CH1 MASTERING HW DUE

20-Aug Language of Anatomy

21-Aug Language of Anatomy

22-Aug Organ Systems Overview

23-Aug Matter and Energy Atoms and Elements, EX1&2 PRACTICE MASTERING DUE

24-Aug Chapter 1 Quiz, Molecules and Mixtures, Chemical Bonds, Chemical Reactions, Ex1&2

MASTERING HW DUE

27-Aug Exercise 1&2 Practical Test

28-Aug Inorganic Compounds (Water, Salts), Acid/Bases

29-Aug Organic Compounds, Carbohydrates, Lipids, CH2 MASTERING HW DUE

30-Aug Proteins

- 31-Aug Chapter 2 Quiz, Nucleic Acids
- 3-Sep No School
- 4-Sep CH 1&2 Test
- 5-Sep Plasma Membrane, Membrane Transport
- 6-Sep Cellular Organelles, EX3&4 MASTERING PRACTICE DUE
- 7-Sep Chapter 3 Quiz, Mitosis and Meiosis
- 10-Sep Exercise 3&4 Practical Test
- 11-Sep Cellular Respiration CH3 MASTERING HW DUE
- 12-Sep Protein Synthesis transcription translation
- 13-Sep Epithelial Tissue
- 14-Sep Video Log 1 due, Chapter 4 Quiz, Epithelial Tissue
- 17-Sep Connective Tissue
- 18-Sep Muscle and Nervous Tissue
- 19-Sep Epidermis & Dermis, CH5 MASTERING HW DUE
- 20-Sep Skin Appendages, EX5 MASTERING PRACTICE DUE, EX6 MASTERING PRACTICE DUE
- 21-Sep Video Notes Extra Credit 1 due, Chapter 5 Quiz, Homeostatic imbalances
- 24-Sep Exercise 5&6 Practical Test, EX5&6 MASTERING HW DUE, EC1 MASTERING DUE
- 25-Sep CH 3&5 Test
- 26-Sep Skeletal cartilages Classification of Bones, Functions of Bone
- 27-Sep Bone Development, CH6 MASTERING HW
- 28-Sep Chapter 6 Quiz, Bone Development Homeostatic Imbalances of Bone
- 1-Oct Bones and parts of bones
- 2-Oct Bones and parts of bones
- 3-Oct Bones and parts of bones
- 4-Oct Bones and parts of bones, EX7-9 MASTERING PRACTICE DUE
- 5-Oct Chapter 7 Quiz, Bones and parts of bones, EX 7-9 MASTERING HW DUE
- 8-Oct No School
- 9-Oct (CH7) Exercise 7-9 Practical Test
- 10-Oct Classification of Joints Fibrous, Cartilaginous, Synovial joints, CH8 MASTERING HW DUE
- 11-Oct Movements Types of Synovial Joints
- 12-Oct CH 6&8 Test
- 15-Oct Muscle Tissue, Skeletal Muscle, Gross & Microscopic Anatomy
- 16-Oct Muscle Tissue, Skeletal Muscle, Gross & Microscopic Anatomy
- 17-Oct Sliding Filament Model, CH9 MASTERING HW DUE
- 18-Oct Head, neck, trunk
- 19-Oct Video Log 2 due, Chapter 9 Quiz, Limbs, EX10-12 MASTERING HW DUE
- 22-Oct Exercise 10-12 Practical Test
- 23-Oct Muscle Contraction Energy source, EC2 MASTERING DUE
- 24-Oct Muscle Fatigue Force of Muscle Contraction, Adaptations to Exercise, CH10 MASTERING HW DUE
- 25-Oct Actions/Interactions of Skeletal Muscles, Naming Skeletal Muscles Muscle Mechanics
- 26-Oct CH 9&10 Test
- 29-Oct Functions & Divisions of the Nervous System Nervous Tissue Neurons
- 30-Oct Membrane potentials
- 31-Oct Synapse Neurotransmitters
- 1-Nov Neuron Anatomy & Physiology Glial cells Nerves, CH11 MASTERING HW DUE
- 2-Nov Video Notes Extra Credit 2 due, Chapter 11 Quiz, Neural Integration
- 5-Nov Fundamentals of the Nervous System and Nervous Tissue
- 6-Nov The Brain Cerebral Hemispheres
- 7-Nov The Diencephalon, Brain Stem

- 8-Nov Cerebellum Functional Brain Systems, Higher Mental Functions
- 9-Nov Chapter 12 Quiz, Brain Wave Patterns and the EEG, Consciousness, Sleep and Sleep-Wake

Cycles, CH12 MASTERING HW DUE

- 12-Nov Kairos retreat
- 13-Nov Kairos retreat
- 14-Nov Kairos retreat
- 15-Nov Brain Sheep brain dissection
- 16-Nov Brain Sheep brain dissection
- 19-Nov Language Memory Protection of the Brain
- 20-Nov Cranial Nerves, EX13-14 MASTERING HW DUE
- 21-Nov No School
- 22-Nov No School
- 23-Nov No School
- 26-Nov Exercise 13&14 Practical Test
- 27-Nov CH 11&12 Test
- 28-Nov The Spinal Cord, Plexuses, Reflex Activity: Reflex Arc
- 29-Nov Sensory Integration: From Sensation to Perception, Sensory Receptors
- 30-Nov The Eye, The Special Senses
- 3-Dec The Eye
- 4-Dec cow eye dissection, CH13 MASTERING HW DUE
- 5-Dec The Chemical Senses: Smell and Taste
- 6-Dec The Ear: Hearing and Balance, EX15-17 MASTERING PRACTICE DUE
- 7-Dec Video Log 3 due Chapter 13 Quiz, Nerves and Associated Ganglia, Spinal Nerves, EX15-17 MASTERING HW DUE
- 10-Dec Exercises 15-17 Practical Test
- 11-Dec Peripheral Motor Endings, Spinal Reflexes, EC3 MASTERING DUE
- 12-Dec Last day for New Discoveries Presentations, Peripheral Motor Endings, Spinal Reflexes
- 13-Dec The Autonomic Nervous System, CH14 MASTERING HW DUE
- 14-Dec Video Notes Extra Credit 1 due, The Autonomic Nervous System
- 17-Dec The Autonomic Nervous System
- 18-Dec CH 13&14 Test
- 19-Dec Final Exam
- 20-Dec Final Exam
- 21-Dec

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

Students must sign up for a lab section. Labs are worth 30% of your total course grade.

## **TESTING AND EVALUATION:**

#### Grading Scale:

A
A-
B+
В
B-
C+
C
C-
D+

64.5-68.4 D <64.5 E

Grade Weight:

Exams 55% Assignments 15% Laboratory 30% Course Total 100%

#### Exams:

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. Final exams cannot be made up except in the case of an excused absence.

## Assignments:

There will be various homework assignments throughout the semester through Mastering A&P and quizzes both in class and as homework. In addition, you will be required to take notes and keep a log of supplementary videos. 15% of your grade will be assigned as homework throughout the semester. Homework is due by the date assigned. It is your responsibility to be aware of the due dates (see Mastering A&P calendar). There are no extensions for homework. These assignments should be completed individually. Think of them as a quiz that you complete with your notes and book. Consider these assignments free points for studying that help you prepare for your tests!

There are no makeups for late homework or missed quizzes.

## **INSTRUCTOR EXPECTATIONS:**

# Attendance/Participation:

Regular attendance is important to understand course content and perform required competencies. Absences, late arrivals, and early departures will negatively impact your grade.

# Makeup Policy:

See Exams and Assignments sections above.

## ADDITIONAL INSTRUCTOR/SECTION INFORMATION:

The student shall demonstrate a foundational knowledge of the human structure and function upon completion of the course. The student shall develop his or her understanding of how the different body systems work together to maintain homeostasis. In this course, the student will learn (not simply memorize) A LOT of material. Students will be responsible for all of the information assigned. This course will require significant effort on the student's part. Because

of the amount of material, it is expected that for each hour of class time, the student will spend a minimum of two hours studying the material outside of class. This equates to a minimum of 7.5 hours per week spent on the lecture material. Students should utilize their textbook materials, notes, Canvas (the course webpage), instructor, classmates (discussion groups are highly encouraged), the Academic Success Center, and any other resource that is available.

Communication: We will communicate through our Canvas accounts. This way we will each have a record of our communications. It is your responsibility to check your Canvas and e-mail daily. When you send a message to me via Canvas, I will do my best to reply promptly. Please be patient. Anytime that I need to communicate with you outside of class, I will send an announcement/message through Canvas. This will include changes in schedule, helpful information, etc.

Netiquette: Play nicely when you write anything on our class Canvas site. Consider others as more important than yourself. If you have an "issue," then state it nicely. Be professional. Check the spelling and grammar of anything that you post.

Studen	ts are expected to maintain a beneficial learning environment and be respectful of others.
Disrup	tive students will be removed from the classroom. Students are expected to answer
questio	ns and actively participate in discussions!
	no side conversations,
	cell phones on vibrate and stowed away
	no text messaging
	raise your hand to ask or answer questions

This class requires students to use the Internet for accessing Canvas and the Modified My Lab and Mastering A&P. Students need to have Internet/computer access outside of the classroom so they can access these sites.

give other students the opportunity to ask and answer questions

#### INSTITUTIONAL INFORMATION



## **PARTICIPATION**

#### Attendance:

Regular attendance is important to understand course content and perform required competencies. Absences, late arrivals, and early departures will negatively impact your grade and may result in a grade of "E" which may harm your Financial Aid eligibility. Please ensure that you understand the attendance policy for each course and follow the instructor's guidelines for communicating about unavoidable absences and making up course work, if permissible.

## E-mail:

You are responsible for checking your College email frequently for college and course-related communications. RSC recommends checking email daily in recognition that certain communications may be time-sensitive. Please use proper etiquette when submitting emails to College personnel: a positive tone, correct spelling and grammar, and verify the intended recipient's title and address before sending the email. These details will expedite communication.

# **Incomplete:**

The grade of incomplete ("I") in a course is a temporary grade, reflecting that while your work in the course is qualitatively satisfactory, but for some extenuating circumstances, a small fraction cannot be completed by the scheduled end date. Before an "I" can be awarded, there must be a plan in place, verified by signatures or emails by both you and your instructor, outlining exactly what work must be accomplished and a schedule for doing so. The student must complete and submit the coursework no later than the sixth Friday following the start of the semester or term subsequent to the one in which the "I" was received. Failure to adhere to this plan will result in calculating the course grade with 0s for all remaining assignments. Until the "I" is resolved, the credit hours will not be counted or considered for any purpose. Your financial aid and academic standing may be negatively impacted. For more information see the College Catalog "Grading System" and "Registration."

In short, taking an incomplete should be avoided. However, if it becomes impossible for you to complete a course, please contact your instructor and Financial Aid advisor immediately.

## Withdrawal:

You are responsible to officially drop/withdrawal from a course when you decide to no longer attend class. Without an official drop/withdrawal from the Office of Advising and Counseling, the institution has the right to identify a date of drop/withdraw. This may result in receiving an "E" in all classes and being required to pay all assessed fees and tuition, even though you have actually left the College. Any/all of these may have a negative impact upon future Financial Aid eligibility. Please contact your Academic and Financial Aid Advisors for assistance.

#### STUDENT CODE OF CONDUCT

## **Academic Integrity:**

Attempting to deceive, defraud, or use dishonesty for one's own gain will not be tolerated. Dishonesty in any form may result in a grade of "zero" for the activity, whether in providing or utilizing materials inappropriately. Additionally, individual programs may impose greater sanctions. This includes – but is not limited to – plagiarism, attempting to pass off someone else's work as one's own; submitting substantially the same work, using materials created for one course in another without the instructor's knowledge and permission; securing/providing answers to a test apart from the instructor's directions, etc. Students are encouraged to review the Student Code of Student Conduct on the college website

(http://www.rhodesstate.edu/currentstudents) for additional information.

**Student Support:** 

Resources	Location	Phone
Accommodative Services	TL 132	419-995-8009
Advising	PS 148	419-995-8400
Campus Security	TL 150	419-995-8499
Career Services	PS 150	419-995-8352
Computer Help Desk	KH 102	419-995-8069
Counseling Services	PS 216	419-995-8133
Financial Aid	PS 150	419-995-8800
Library	CK150	419-995-8401
Success Coaching	SCI 240	419-995-8039
Testing Center	TL132	419-995-8476
Tutoring	SCI 151	419-995-8039

## **ADA Reasonable Accommodations:**

Accommodative Services supports all students with documented disabilities who are enrolled for credit. Students needing accommodations at Rhodes State should contact Accommodative Services in person in the Technical Education Laboratory building, Room 132 (TL 132), via email at <a href="mailto:AccommodativeService@RhodesState.edu">AccommodativeService@RhodesState.edu</a>, 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.

## **Comprehensive Early Alert Program (CEAP):**

Rhodes State employs a Comprehensive Early Alert Program (CEAP) to identify and provide just-in-time support for students who are having academic difficulties. It is a process by which your instructor will "alert" you and an advisor or success coach when you are absent, frequently late or leaving early, have missed assignments, or earned low test scores. CEAP enhances existing services, such as advising, coaching, and tutoring, which increase student success. Please contact your instructor, advisor, or success coach to learn about what assistance might be available.

## **CAMPUS COMMUNICATION**

### **College Closures:**

Please sign up for **Rhodes Alert** which can be found on the RSC 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. When referring to a media outlet, please remember to look specifically for RSC as other institutions may follow different protocols for weather cancellations.

# **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. 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 cancelled

Because 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. Always, please exercise your best judgment in determining whether to attend classes or activities sanctioned by RSC. Remember that you are accountable for any material missed during an absence without an official delay or announced cancellation.

## **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)

Rhodes State College is a tobacco-free campus. This includes all smoked, chewed, vaporized, and electronic forms.