**BSC 228: Human Physiology (TR)**

**Marshall University**

**Spring 2017**

Faculty: Frederick W. Walker, M.D. **Lecture: Science Building 376 TR 2:00 pm - 3:15 pm**

Office: Science Building, Rm 201 **Labs: Sci. Bldg. 387 M&W 5:30-8:20 T&R 9:00-11:50**

Phone: Office 304-696-3480 **Office Hours:**  T 3:30 pm-4:15; R 12 pm-2 & by appt.

Email: walkerf@marshall.edu **Department Office:** Sci. Bldg. 350 304-696-3148

**Course Description:**This course covers basic human physiology, including (primarily) homeostasis, chemical & cellular composition, cell signaling, nerve & muscle functioning, and body systems such as cardiovascular, pulmonary, digestive, urinary, and reproductive. *Three lecture hours and two lab hours per week. Prerequisite: BSC227.*

**Purpose of this Course:**This course focuses on the functioning of many of the human organ systems. The course will further provide fundamental knowledge to prepare students for careers in the health sciences. Emphasis is placed not only on basic physiology, but also on concepts such as multifunctionality, redundancy and inter-connectivity. Study habits, exam preparation & performance skills, and following directions are also covered and evaluated.

**Required Textbooks and Course Materials:** • McGraw-Hill “Connect” Code w/eBook, Human Physiology, Vander, 14th Ed. (MU bookstore & online)

 • BIO 228 Lab Guide (purchased only at MU bookstore)

 • Turning Point NXT Response Card (Clicker) (sold/rented at MU bookstore (can resell) or online.

**University Policies (additional “Course Policies” are at the end of the syllabus):**

By enrolling in this course, you agree to the University Policies listed herein. Please read the full text of each policy by going to [www.marshall.edu/acdemic-affairs/policies](http://www.marshall.edu/acdemic-affairs/policies) or [http://www.marshall.edu/academic-affairs/?page\_id=802](http://www.marshall.edu/academic-affairs/?page_id=802e) Academic Dishonesty / Excused Absence Policy for Undergraduates / Computing Services Acceptable Use / Inclement Weather / Dead Week / Students With Disabilities / Academic Forgiveness / Academic Probation and Suspension / Academic Rights and Responsibilities of Students / Affirmative Action / Sexual Harassment. It is the student’s responsibility to review these policies.

**Student Learning Objectives & Academic Outcomes:**

Upon satisfactory completion of this course, the student will be able to:

1. Recall basic physiological terminology and explain basic physiologic concepts clearly and accurately. (Academic Outcomes: communication, critical thinking)

2. Recall and recognize major disorders of the human body systems, especially how they are governed by basic physiological principles. (Academic Outcomes: communication, critical thinking)

3. Visually identify, diagram, correctly spell, and describe principal physiological concepts as a basis for understanding disorders of the human body. (Academic Outcomes: communication, critical thinking)

4. Describe and evaluate how a basic knowledge of physiology is utilized in many healthcare areas such as medicine, dentistry, nursing, medical imaging, physical & occupational therapy, and be able to apply that information in clinical examples via case studies. (Academic Outcomes: communication, critical thinking)

5. Use technology to investigate the human body systems via the use of computers. (Academic Outcome: science and technology)

**Assessment of Outcomes:**

Critical Thinking: Critical thinking outcomes will be assessed via laboratory assignments, quizzes and exams. Some exams will include case study questions which require students to make judgments regarding the functioning of a system, including a basic background knowledge of human anatomy.

Communication: Students must accurately express themselves using proper English and correct physiological terminology when answering essay questions on exams. Students will also complete some laboratory assignments which require written responses.

Science and Technology: Students will use computers to view modeling of physiological processes. Some current applications of technology in medicine will be investigated in this course.

Information Literacy: Students will gather and analyze data from multiple sources including the internet.

**Course Requirements & Assessment Methods:**

Around seventy-five percent of your course grade will come from the lecture component and twenty-five % will come from the laboratory component. As you can see below, lecture and lecture points are weighted equally. To calculate your standing in the class, take the number of points earned to date and divide that by the total points possible. This will give you a percentage score and its corresponding grade. The *final* grade cannot be determined until the final exam is calculated. Blackboard cannot convert quiz percentage into a point total. Include this # as if you have finished the semester with the same percentage when the activity IS worth 100 points. This method WILL give you a rough standing going into your final exam, as a study/planning aid. Bonus points are NOT used to raise your grade to a “D” (above 55%).

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| Unit Exams: (4 @ 100 points each) | **50%** |
| Connect LearnSmart/RAT/Quiz Activities (100 points) | **12.5%** |
| Laboratory Evaluations: Practical Examinations (2 @ 100 points each) (Extra credit quizzes (?# @ 3-5 pts. each) | **25% consisting of:** 200 pts (max 20 pts.) |
| {*Some* lecture bonus points *will be* offered/awarded} | **?** |
| Cumulative Final Exam (100 points) | **12.5%** |

**Grade Scale:** A = 88% (704 pts.) or > B = 77% (616 pts.) – 87.5% C = 66% (528 pts.) – 76.5%

 D = 55% (440 pts.) – 65.5% F = < 55% Percentages rounded to nearest whole #.

**Course Policies:**

A. Attendance:
 I take lecture attendance for Federal guidelines, and, occasionally, for bonus points. Course grades ARE reduced 1% for each unexcused LAB absence. If you miss a class you will not be able to make it up but you will still be held accountable for the material presented. You are responsible for finding out the material covered and for completing any laboratory assignments. All work not made up receives a grade of zero.

Examinations may consist of multiple choice, true/false, & short answer case study questions. Exam scores (exempting the first) ARE reduced by four (4) points (0.5%) for failure to be prepared by not having a functioning Response Card (clicker device) for each lecture exam, necessitating “hand-grading”.

 **Exams are not to be missed. You must notify me (email) within 24 hours if you plan to take the make-up exam. Make-up exams will be given/taken within 2-6 days of the original exam date, even if your University Approved Absence is pending!**

B. Class Handouts:

 A few subject handouts will be made available on BlackBoard. We usually make them available at the time the lecture slide material is made available, but we sometimes may do so earlier

C. Class Cancellation Procedures:

 In the event of the University’s cancellation of a class session, I will modify the course syllabus to cover the more relevant topics. Check the MU website for information regarding any school closures. Any assignments due the day of the cancelled class will be given/due at the next lab meeting.

 D. Laboratory Reports:

 Any laboratory assignments must be completed and submitted at the G.A. designated time. If a lab is missed you MAY be able to attend another of our “class’s” sessions that week. There will be no make-up labs allowed outside of our sections. The material covered in each lab may be discussed at the end of each session. Written assignments are the student’s responsibility. ***Points may be deducted from any lab report score for each day it is submitted late.***

E. Student Responsibilities:
 • Come to class on time, with your clicker, and take careful notes.

 • Read/skim the text PRIOR to the class in which it is being discussed/covered. SOON AFTER class,

 review (if “read” prior), or “read” (if only skimmed prior), the Chapter again!

 •Read the laboratory exercise PRIOR to the laboratory session!

 • Re-write your notes as soon as possible after lecture. Take time to study a little EACH day.

 You will need to spend at least 2-3 hours on each chapter. Plan to review notes/text for a minimum of

 one hour each day.

 • Ask questions if you do not understand a concept or assignment. However, make sure your questions

 are relevant to the topic. Do not monopolize class time with questions. If you are having difficulty with

 the material please see me during my office hours.

 • Form study groups with others in the class!

 • Complete and submit all laboratory assignments on time.

 • Do not leave lab early. Use any extra time at the end of lab to study models and teach one another.

Note: The federal definition of a credit hour is that you are assigned at least 2 hours of outside work for every hour you spend in the classroom. This has been done in order to assure that a college “credit” means the same thing for all students, in all classes and colleges, across the US. If you are not putting a minimum of 6 hours/week into studying and preparing for this class do NOT expect to be successful.

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| Course Component Time | Time Outside of Class | Recommended Activities |
| Lecture(s) (3 hours per wk.) | 5-6 hours per week | 1. Connect “LearnSmart” activity (< 2 hr.)2. Connect “RAT”s (< 2 hr).3. Connect Quizzes (15 minutes)4. Re-writing lecture notes (20 - 30 min.)5 . Review w/ study buddy (30 - 45 min.) |
| Lab (2 hours per week) | 1-2 hours per week | 1. Preparing for laboratory sessions (reading the exercise before lab)2. Completing laboratory assignments.3. Study and review in your group |

**Academic Dishonesty:**

 Honesty is paramount and expected. Students who commit acts of academic dishonesty (e.g., cheating, fabrication, facilitating academic dishonesty, and plagiarism) will be subject to formal disciplinary action and will receive a 0 on the exam or assignment involved and, at the discretion of the Chairman of Biological Sciences, the student may receive an F for the course. In addition, a report will be filed with the University Administration for a Student Code Violation.

 If you happen to witness a classmate cheating, you have a responsibility to report it through the appropriate channels. Incidents will be followed up in a timely manner. ***The instructor does NOT need to witness the incident for it to be reported.*** Student reporting must be done in good faith with the goal of retaining academic integrity.

**Disability Support Services:**

 MU is committed to serving students who have documented physical, learning, psychological, or other disabilities. Students with a disability are responsible for contacting the Office of Disability Services at 304-696-2271 to discuss their need for accommodations. Information shared with O.D.S. is kept in strict confidence.

**Tutoring Support Services:**

 Tutoring support is available for all students. The Tutoring Center is in Laidley Hall. If you feel that a tutor would help with your success in this class, a request for tutoring may be made by calling 304-696-3169. ***NOTE: tutoring support must be requested by the drop deadline for the course.***

**Inclement Weather – MU Closings:**

If there is inclement weather, the college may be closed and classes cancelled. You can check the status of the college via several methods:

• Call the MU Emergency Information Number: 304-696-3170.
• Check the University website at [muwww-new.marshall.edu/academic-affairs/policies/#InclementWeather](http://www.marshall.edu/Tutoring/default.asp?FA=Academics)
• Listen to radio or television broadcasts for announcements.

If class is cancelled you are expected to keep up with all assignments and readings.

### *Some Important Dates for 15-Week Classes – Spring 2017*

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| January 9th  | Spring Semester classes begin; Our first class – 1/10 |
| January 13th  | Add / Drop (full refund) Deadline |
| January 16th  | MU closed for Martin Luther King Holiday |
| February 27th  | Fresh./Soph. Mid-Term D & F grades reported |
| March 17th  | Withdrawal deadline for full-semester course |
| March 20th – 25th  | Spring Break  |
| May 1st – 5th  | Final Exam Week; Our Final is Tue., time TBD |
| May 6th  | Spring Semester Ends – Summer Break begins |

The instructor reserves the right to modify and/or change the course syllabus

 (and schedule) with reasonable notification to students.