**FALL 2023**

**COURSE SYLLABUS**

**DIVISION OF NATURAL SCIENCE**

**CAMPBELLSVILLE UNIVERSITY**

**I. Course Description:**

BIO 221 Human Anatomy and Physiology I

Course description from 2015-2017 catalog:

“An introduction to the structure and function of the human body including

the integumentary, skeletal, muscular, and nervous systems. If a

professional or graduate school requires anatomy and physiology, four

hours can be counted on a biology major or minor; however, to receive

four hours of credit, the student must complete the sequence, I and II.

Includes one 150-minute laboratory per week. Students cannot enroll in

this course if they are not academically eligible to enroll in ENG 111 and

MTH 111 or are required to take GS 110. BIO 110 or CHE 101

recommended.”

**II. Meeting Times:**

Lecture (-01 MWF 9:00 a.m. – 9:50 a.m. ATRIUM

Lecture (-02): MWF 11:00 a.m. – 11:50 a.m. SSC 113

Lab (-91): T 2:00 p.m. – 3:50 p.m. BSN 112

Lab (-92): W 2:00 p.m. – 3:50 p.m. BSN 112

Lab (-93): R 2:00 p.m. – 3:50 p.m. BSN 112

**III. Contact Information:**

Instructor:

Dr. William J Mackay Office: Carter Hall 204

Phone: (270) 789-5487 (office), 814-440-7950 (cell)

E-mail: wjmackay@campbellsville.edu

Office Hours: MWF 8-9

M 12-2

TR 8-9:30

Dr. Mackay’s Web Page: [www.wjmmackay.com](http://www.wjmmackay.com)

To report emergencies or an incident on campus please call

The Office of Campus Safety and Security @ (270)-789-5555 or cell phone (270)-403-3611.

**IV. Course Objectives:**

Human Anatomy and Physiology is a course for Nursing majors and preparation for other allied health programs and heath profession programs.

Human Anatomy and Physiology is designed to provide an overview of how the human body functions and an opportunity for the students to begin to learn the parts of the body. In some cases, the ways in which the body does not function properly will be covered.

Desired outcomes and assessment:

1. Students will be able to recall the basic ideas of physiology.

(Evidence: exams)

2. Students will be able to locate selected parts of the body.

(Evidence: exams)

3. Students will be able to describe selected diseases of humans.

(Evidence: exams)

**V. Course Materials:**

Texts:

Choose either the bundle of Connect with electronic version of the textbook and the laboratory manual, ISBN: 9781260902747 **OR**

Choose the individual items:

1. VanPutte, C et al. 2023. Seeley’s Anatomy and Physiology, 13th ed. NY: McGraw-Hill Education. ISBN: 978126410388-1 (bound) or other format. **AND**

2. Wise, E. 2020. Laboratory Manual Seeley’s Anatomy and Physiology, 12th ed. NY: McGraw-Hill Education. ISBN: 9781260399059.

**VI. Course Requirements:**

Each lecture will cover the textbook information which is perceived as the most difficult or most important. It is important to read the textbook chapters before lecture in order to have the necessary background to follow the lecture.

Examination Material:

The major exams will cover lecture notes. The questions on an exam may be objective or discussion. The types of questions on the exams will include multiple choice, short answer, and essay. If there is a change from the schedule above, notice of the date of major exams will be given at least one week in advance.

Periodic lecture and/or lab quizzes will be given to encourage preparation.

Special assignments and extra work will not be allowed as a substitute for performance on quizzes, assignments, or exams.

Lab:

See below for a tentative lab schedule.

**LAB SCHEDULE**

(tentative)

WEEK DATES EXERCISES

|  |  |  |
| --- | --- | --- |
| 1 | Aug. 22-24 | No Lab |
| 2 | Aug. 29-31 | Exercise 1 Introduction to Lab Science, Chemistry, Organs, Systems, and Organization of the Body |
| 3 | Sep. 5-7 | Exercise 2 Microscopy  Exercise 3 Cell Structure and Function |
| 4 | Sep. 12-14 | Exercise 4 Tissues  Exercise 5 Integumentary System |
| 5 | Sep. 19-21 | Lab Exam 1 – Exercises 1-5 (50 points) |
| 6 | Sep. 26-28 | Exercise 6 Introduction to the Skeletal System  Exercise 7 Appendicular Skeleton  Exercise 8 Axial Skeleton: Vertebrae, Ribs, Sternum, Hyoid |
| 7 | Oct. 3-5 | Exercise 9 Axial Skeleton: Skull  Exercise 10 Joints and Movement |
| 8 | Oct. 10-12 | **NO LAB FALL BREAK** |
| 9 | Oct. 17-19 | Lab Exam 2 – Exercises 6-10 (50 points) |
| 10 | Oct. 24-26 | Exercise 12 Overview of Muscles and Muscles of the Shoulder and Upper Extremity  Exercise 13 Muscles of the Hip, Thigh, Leg, and Foot |
| 11 | Oct. 31-Nov. 2 | Exercise 14 Muscles of the Head and Neck  Exercise 15 Muscles of the Torso |
| 12 | Nov. 7-9 | Lab Exam 3 – Exercises 12-15 (50 points) |
| 13 | Nov. 14-16 | Exercise 17 Brain and Cranial Nerves  Exercise 18 Spinal Cord and Somatic Nerves  Exercise 22 Eye and Vision  Exercise 23 Ear, Hearing, and Balance |
| 14 | Nov. 28-30 | Exam 4 Exercises 17, 18, 22, and 23 (50 points) |
| 15 |  |  |

Assistance available:

Assistance is available from the instructor. Also, check at the BASC for tutoring and writing assistance.

**VII. Evaluation and Grading Scale:**

Lecture Exams (Sep. 7, Sep. 28, Oct. 19, Nov. 9, Dec. 4/6) 50%

Lecture/Lab Quizzes 30%

Lab Exams (Sep. 20, Oct. 11, Nov. 1, Nov. 29) 20%

TOTAL 100%

(Late work: The student will lose 10% of the points for an assignment for each class period that it is late. Unless previous arrangements have been made, no work will be accepted after 5:00 p.m. of the last day of classes. Work is due at the beginning of class unless otherwise specified.)

Letter grades will be assigned based on your point totals with the following:

90% and above = A

89% - 80% = B

79% - 70% = C

69% - 60% = D

59% and below = F.

The lower limit for one or more of the letter grade ranges may be lowered depending on the performance of the class.

**VIII. Course Policies:**

Expectations of the student:

Students are expected to read material before class, be on time to all classes and labs, listen and take notes during class, review notes and material after class, ask questions or get assistance as needed, be prepared for exams by reviewing notes and material to be covered by the exam, and submit assignments on time. Students should expect to devote at least 2 hours outside of class for every hour in class.

Unless informed otherwise lectures and labs meet as long as the University is in session. See the CU Web site for weather related announcements.

**Academic Integrity**

**Academic integrity is expected from all students and the instructor. Cheating or plagiarism will not be tolerated and will result in a 0 for the exam or assignment.** A second occurrence may result in a course grade of F. See the CU catalog or the student handbook. Also see the Division of Natural Science Academic Integrity Policy.

**NOTE: THE PROFESSOR RESERVES THE RIGHT TO CHANGE ANYTHING ON THIS SYLLABUS EXCLUDING THE GRADING SYSTEM.**

**IX. Course Outline:**

Prerequisites: None, although BIO 110 or CHE 101 is recommended.

Topical Outline:

CHAPTER TOPIC

1 The Human Organism

2 The Chemical Basis of Life

3 Cell Biology

**EXAM I** – Sep. 8\*

4 Tissues

5 Integumentary System

6 Skeletal System: Bones and Bone Tissue

**EXAM II** – Sep. 27\*

7 Skeletal System: Gross Anatomy, pp. 196-199

8 Joints and Movement

9 Muscular System: Histology and Physiology

10 Muscular System: Gross Anatomy, pp. 317-321

**EXAM III** – Oct. 20\*

11 Functional Organization of Nervous Tissue

12 Spinal Cord and Spinal Nerves

13 Brain and Cranial Nerves

**EXAM IV** – Nov. 10\*

14 Integration of Nervous System Functions

15 The Special Senses

16 Autonomic Nervous System

**EXAM V** – Dec. 4/6\*

**\*Except for exam V, exam dates are tentative.**

**X. Bibliography**

Sources for further study may be found listed in the Web site for the textbook.

**XI. Division Policies:**

**XII. Institutional Policies:**

Students with learning differences

Title IX

Attendance

COVID-19

**APPENDIX A**

**REQUEST TO MAKE-UP WORK/BE EXCUSED FROM ASSIGNMENT**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Print and sign)

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of Absence \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (this form must be submitted at least by the next class period that you are present or before the absence for participation in a university-sponsored event)

Reason for Absence

□ Illness

□ Unavoidable personal emergency

□ Participation in a university-sponsored event

Provide more information or other reason:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Work missed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Work to be made-up by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Excused from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Work counts as a zero (0)

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Instructor date