

This syllabus is provided as a general informational guide. Some of the information may vary depending on the specific course section and instructor. Different sections of the same course may require different textbooks. Verify the section specific textbook information in the CUNY's Academic Course Schedule Web Page. Modifications of the grading system presented here will be communicated by the instructors of the sections when they meet the class.

BOROUGH OF MANHATTAN COMMUNITY COLLEGE
The City University of New York
Department of Science

Anatomy & Physiology I
Bio 425
Spring 2021

Lecture hours: 3
Lab hours: 3
Credits: 4

Instructor Information: _____
Name
E-mail/phone
Office

Course Description:

This is the first semester of a two-semester course that explores the human body as an integrated, functional complex of systems. Terminology, structure and function of each organ system, and the interrelationships between systems are emphasized.

Prerequisites/Co-requisites:

CHE 118 or CHE 121, or departmental approval

NOTE: BIO 425 does not meet the science requirement in the liberal arts curriculum.

Course Student Learning Outcomes	Measurements
1. Students will be able to identify examples of homeostasis in humans.	1. Quizzes and examinations.
2. Students will be able to recognize the structure and function of each tissue type and discuss the how each type is organized in an organ.	2. Laboratory exercises and virtual lab activities and practicals.
3. Students will be able to discuss the integration of organ systems.	3. Quizzes and examinations.

	General Education Learning Outcomes	Measurements
X	Quantitative Reasoning- Students will be able to use quantitative skills and the concepts and methods of mathematics to solve problems.	Laboratory exercises and mathematically based test questions.
X	Scientific Reasoning- Students will be able to apply the concepts and methods of the natural sciences.	Students will assimilate class and laboratory information in order to answer questions related to the health field.

Evaluation of Students: The course will be graded on the following (as determined by instructor):

- **Lecture: 70-80%**
- **Lab: 20-30%**

Use of Technology:

- Blackboard and on-line textbook (Connect) module.
- Other technology will be required per the instructor for supplementing online lectures and lab activities.

This syllabus is provided as a general informational guide. Some of the information may vary depending on the specific course section and instructor. Different sections of the same course may require different textbooks. Verify the section specific textbook information in the CUNY's Academic Course Schedule Web Page. Modifications of the grading system presented here will be communicated by the instructors of the sections when they meet the class.

REQUIRED TEXTBOOK & READINGS:

Anatomy and Physiology: The Unity of Form and Function, (9th edition), by Saladin, Kenneth S., McGraw-Hill Publishers, 2020.

Choose one of the following versions:

- Custom Loose-Leaf with *ConnectPlus*: **ISBN #9781264370368** (\$178.55, College Bookstore)
- e-text with *ConnectPlus*: through instructor's *Connect* site (reduced price)

REQUIRED LABORATORY MANUAL:

Anatomy & Physiology Laboratory Manual for BIO 425 (BMCC custom version), by Goodwyn, L. and Salm, S., Morton Publishing Company, 2014:

- BMCC custom version: **ISBN#9781617313653** (\$44.65, only available from the College Bookstore. Students should order their lab manual ASAP and it will be mailed to them from the Bookstore.

OTHER REQUIRED MATERIALS:

*McGraw-Hill **ConnectPlus**: on-line course material for Anatomy and Physiology, 9th ed. (packaged with BMCC custom loose-leaf or hardcover edition or available from the publisher's website).*

COLLEGE BOOKSTORE (all books can be ordered online):

<https://bmcc.bncollege.com/shop/bmcc/page/find-textbooks>

This syllabus is provided as a general informational guide. Some of the information may vary depending on the specific course section and instructor. Different sections of the same course may require different textbooks. Verify the section specific textbook information in the CUNY's Academic Course Schedule Web Page. Modifications of the grading system presented here will be communicated by the instructors of the sections when they meet the class.

BMCC is committed to the health and well-being of all students. It is common for everyone to seek assistance at some point in their life, and there are free and confidential services on campus that can help.

Single Stop <https://www.bmcc.cuny.edu/student-affairs/single-stop/>, room S230, 212-220-8195. If you are having problems with food or housing insecurity, finances, health insurance or anything else that might get in the way of your studies at BMCC, come by the Single Stop Office for advice and assistance. Assistance is also available through the Office of Student Affairs, S350, 212-220- 8130.

Counseling Center <https://www.bmcc.cuny.edu/student-affairs/counseling/>, room S343, 212-220-8140. Counselors assist students in addressing psychological and adjustment issues (i.e., depression, anxiety, and relationships) and can help with stress, time management and more. Counselors are available for walk-in visits.

Office of Compliance and Diversity <https://www.bmcc.cuny.edu/about-bmcc/compliance-diversity/>, room S701, 212-220-1236. BMCC is committed to promoting a diverse and inclusive learning environment free of unlawful discrimination/harassment, including sexual harassment, where all students are treated fairly. For information about BMCC's policies and resources, or to request additional assistance in this area, please visit or call the office, or email olevy@bmcc.cuny.edu, or twade@bmcc.cuny.edu. If you need immediate assistance, please contact BMCC Public safety at 212-220-8080.

Office of Accessibility <https://www.bmcc.cuny.edu/student-affairs/accessibility/>, room N360 (accessible entrance: 77 Harrison Street), 212-220-8180. This office collaborates with students who have documented disabilities, to coordinate support services, reasonable accommodations, and programs that enable equal access to education and college life. To request an accommodation due to a documented disability, please visit or call the office.

Class Participation

Participation in the academic activity of each course is a significant component of the learning process and plays a major role in determining overall student academic achievement. Academic activities may include, but are not limited to, attending class, submitting assignments, engaging in in-class or online activities, taking exams, and/or participating in group work. Each instructor has the right to establish their own class participation policy, and it is each student's responsibility to be familiar with and follow the participation policies for each course.

BMCC Policy on Plagiarism and Academic Integrity Statement

Plagiarism is the presentation of someone else's ideas, words or artistic, scientific, or technical work as one's own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism. Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC's Web site, <https://www.bmcc.cuny.edu/>. For further information on integrity and behavior, please consult the college bulletin (also available online <https://www.bmcc.cuny.edu/wp-content/uploads/ported/communications/pdfs/catalog/current.pdf>).

This syllabus is provided as a general informational guide. Some of the information may vary depending on the specific course section and instructor. Different sections of the same course may require different textbooks. Verify the section specific textbook information in the CUNY's Academic Course Schedule Web Page. Modifications of the grading system presented here will be communicated by the instructors of the sections when they meet the class.

LECTURE

<u>LECTURE SESSION</u>	<u>TOPICS</u>	<u>CHAPTER</u>
1	Introduction/ Body Organization***	Chapter 1/Atlas A
2	Cells	Chapter 3
3	Cellular Function	Chapter 4
4	Histology: Tissues/Membranes	Chapter 5
5	Integumentary System	Chapter 6
6	Bone Tissue Skeletal System: Axial	Chapter 7 Chapter 8
7	Skeletal System: Appendicular Joints	Chapter 8 Chapter 9
8	Muscular System	Chapter 10/Atlas B
9	Muscle Tissue/ Membrane Potentials	Chapter 11
10	Nervous System/ Nerve Tissue Spinal Cord/Spinal Nerves	Chapter 12 Chapter 13
11	Brain/Cranial Nerves	Chapter 14
12	Autonomic Nervous System	Chapter 15
13	Sense Organs	Chapter 16
14	Endocrine System	Chapter 17
15	Review and Final Examination	

***Chapter 2 (Chemistry of Life) can be reviewed at the instructor's discretion to reinforce relevant chemistry topics.

This syllabus is provided as a general informational guide. Some of the information may vary depending on the specific course section and instructor. Different sections of the same course may require different textbooks. Verify the section specific textbook information in the CUNY's Academic Course Schedule Web Page. Modifications of the grading system presented here will be communicated by the instructors of the sections when they meet the class.

LABORATORY***

<u>LAB SESSION</u>	<u>TOPICS</u>	<u>LAB EXERCISE</u>
1	Body Positions and Measuring	Ex. 1 (pages 1-12)
2	The Microscope	Ex. 2 (pages 13-24)
3	Movements of Molecules	Ex. 3 (pages 24-31)
4	The Cell	Ex. 4 (pages 33-42)
5	Histology	Ex. 5 (pages 43-58)
6	The Skeletal System-Part One	Ex. 6 (pages 59-74)
7	The Skeletal System-Part Two	Ex. 7 (pages 75-88)
8	Any remaining skeletal/The Muscular System	Ex. 8 (pages 89-96)
9	The Muscular System	Ex. 8 (pages 89-96)
10	The Spinal Column and Reflexes	Ex. 9 (pages 97-104)
11	Cranial Nerves and Sheep Brain	Ex. 10 (pages 105-116)
12	Senses and Sheep Eyeball, Part A	Ex. 11 (pages 117-125)
13	Senses and Sheep Eyeball, Parts B-F	Ex. 11 (pages 126-134)
14	The Endocrine System	Ex. 12 (pages 134-145)
15	Cumulative Practical	

*****Notes for distance lab sessions:**

- Distance labs will include a combination of lab manual activities on inclusive pages, virtual lab simulations, and/or videos to substitute “wet lab” activities, including dissections.
- Distance practical examinations are at the discretion of the instructor.