Fall 9-1-2020

BIOH 365.R01: Human Anatomy and Physiology for Health Professions I

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BIOH365 Syllabus Fall 2020

Human Anatomy and Physiology for Health Professions I

Course Information:

Instructor: Laurie Minns, PhD
Email: Laurie.Minns@mso.umt.edu
Office: BRB106
Phone: 406-243-6013

Office Hours: Mondays and Wednesdays noon-1pm, by appointment; every attempt will be made to find a socially distanced space to meet face-to-face for office hours. Zoom appointments are also available.

Zoom Class Meeting link (MWF 11:00-11:50am)
https://umontana.zoom.us/j/93214247421?pwd=bmpJem5pb0RYUk9qdGJMdjFkbU5MQT09

*Recordings of the live zoom lectures will be available for students to view outside of class times, but there may be a delay in the availability of these recordings.

General Course Information:

Human Anatomy and Physiology is a 3-credit lecture-based, two-semester sequence course (BIOH 365 and BIOH 370). The lecture focuses primarily on physiological and functional processes whereas the laboratory (BIOH366) focuses on anatomical structure using prosected cadavers, laboratory specimens, animal organ dissection, models, simple physiological experiments and computer simulations. This lecture course is co-required for the associated laboratory course (BIOH366).

This course predominately serves students majoring in biology, pre-medical, pre-nursing, pre-physical therapy, other pre-health care professions and health and human performance.

The two-semester sequence is divided as follows:

BIOH 365/366	BIOH 370/371
Body Plan & Organization Homeostasis Cell Biology Review/Metabolism Histology Integumentary System Skeletal System & Articulations Muscular System Nervous System Special Senses	Endocrine System Cardiovascular System Lymphatic System & Immunity Respiratory System Digestive System Metabolism Urinary System Fluid/Electrolytes & Acid/Base Balance Reproductive System

Required Prerequisites:

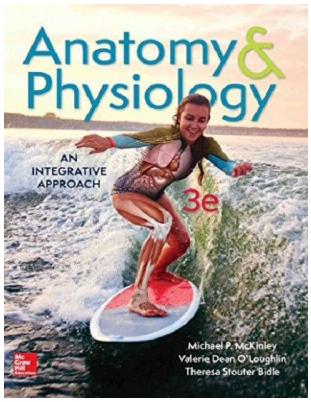
College Chemistry: CHMY 121N (CHEM 151N): Intro to General Chemistry -or-CHMY 141N (CHEM 161N): College Chemistry
College Biology: BIOB 160N (Principles of Biology) -or- BIOH 112 (Introduction to Human Form and Function I)-or- BIOH 113 (Introduction to Human Form and Function II).

Recommended Prerequisites:
BIOB 260: Cellular and Molecular Biology, BIOB272: Genetics and Evolution
**** In order to advance to BIOH370 and BIOH371 for the Spring semester, you must earn a grade of C- or higher in BIOH365 and BIOH366.**

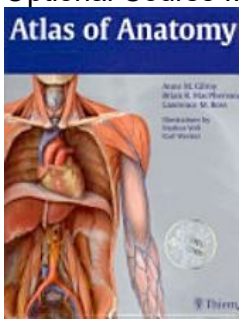
Required Course Materials (Included with your course registration fees):
Click on the link below for the all-inclusive access (you'll get your code from the RedShelf link on the Moodle page). There is an option to buy or rent a paper copy of the book.
Anatomy and Physiology, an Integrative Approach, 3rd edition. McKinley, O'Loughlin, Bidle. McGraw Hill, 2018.

For the Anatomy Physiology Revealed (the online cadaver dissection tool),

Log in at: www.aprevealed.com
Follow the set-up instructions on screen or
click the "***my* Course Content**" button
then the "**Add/Delete Code**" button to enter the code above. use the content code: AyuLD



Optional Course Materials:



Atlas of Anatomy by Anne M. Gilroy, Brian R. MacPherson, Lawrence M. Ross - Thieme (2008) –ISBN-978-1-60404-062-1 or any related edition.

Computers and Course Website Information
Students are expected to be familiar with computers and the Internet. Students are responsible for their own software and computer equipment maintenance and setup as recommended by the University of Montana.

Class-Specific Computer Requirements:

- Students must download and review posted course materials and other assignments prior to laboratory sessions. Students are expected to have a 'back up plan' if personal computers become compromised.
- The University of Montana maintains several computer labs on campus:
- Students are expected to download copies of course information from the Moodle website and to check email for class announcements.
- **For technical support for using Moodle, please contact UM IT support:**

Course Goals:
Upon successful completion of this two-course sequence, you will have conceptual and practical information regarding the anatomy and physiology of the human organism.

Course Objectives:

1) Gain an appreciation for the complementarity of anatomical form with physiological function.
2) Understand how the body systems work to maintain homeostasis.
3) Use critical thinking skills to predict the consequences of homeostatic imbalances on human form and function

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Course outcomes are based on the Human Anatomy and Physiology (HAPS) Learning Objectives:

1) Demonstrate understanding of chemical and biological principles and knowledge that serve as the foundation for understanding human anatomy and physiology.
2) Understand and analyze cellular processes governing development, growth and normal function of the human body.
3) Understand the processes involved with maintaining homeostasis and anticipate what may occur when homeostatic balance mechanisms are lost.
4) Demonstrate practical knowledge of human gross and microscopic anatomy using human cadavers and prepared histological slides.
5) Identify structures in the body and analyze their relationship with other structures.
6) Describe development, regeneration and normal function of body systems
7) Understand the cellular and physiological mechanisms that drive tissue formation and function.
8) Employ the scientific process for understanding principles of anatomy and physiology.
9) Analyze A&P observations and data and determine the potential physiological consequences.

Course Information:
Teaching methods: This course will be a synchronous remote course with class meetings occurring via ZOOM. Students may take the course asynchronously, but understand that students may not work ahead of schedule and that it may take a few days for the zoom lectures to be uploaded onto the Moodle pages. There may be some peer leader led activities that will take place during regular class time. Students are also required to purchase and complete MHE Connect exercises through an online format.

Student Responsibilities:

1) Students are expected to complete the required reading and assignments prior to class meeting times.
2) Students are expected to log on to the course Moodle site regularly to download course materials and read updated course announcements.
3) Students are expected to use a CONNECT account in order to complete online assessments throughout the semester. Failure to purchase an online account will result in forfeiture of points earned through the online platform. No makeup points from failure to complete the online assessments are available.
4) Students are expected to monitor their email and online platforms for important course announcements.
5) Regular attendance in lectures and laboratory is strongly recommended for successful completion of the course.
6) If absence from lecture is necessary due to illness, it is your responsibility to obtain notes from another student.
7) Students are expected to be respectful to each other, the teaching staff and Dr. Minns. Students who fail to do so will be disciplined as described in the student conduct code.

Course Policies

Dr. Minns and the Laboratory Instructors follow academic policies as stated in the 2020-2021 UM Catalog. Students are responsible for being familiar with these policies.

These policies include but are not limited to:

- Student Conduct (http://life.umt.edu/vpsa/student_conduct.php)
- Class attendance
- Credit/No Credit Grading
- Registrar deadlines
- Incomplete Grading Policy
- Audit: not permitted in this course

Plagiarism

- Plagiarism is the representing of another's work as one's own. It is a particularly intolerable offense in the academic community and is strictly forbidden. Students who plagiarize may fail the course and may be remanded to Academic Court for possible suspension or expulsion. (See Student Conduct Code section of this catalog.)
- Students must always be very careful to acknowledge any kind of borrowing that is included in their work. This means not only borrowed wording but also ideas. Acknowledgment of whatever is not one's own original work is the proper and honest use of sources. Failure to acknowledge whatever is not one's own original work is plagiarism.

Students with Disabilities:

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommason Center 154 or 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

Students with disabilities who would like reasonable accommodations must provide documentation to both Dr. Minns and the lab instructor the first week of class so that appropriate arrangements can be made. In the event that students decide after the semester begins that they would like to disclose their disability and request accommodations, students must provide documentation at least 10 days prior to the upcoming assessment so that instructors may prepare appropriately. It is the responsibility of students to make sure they understand the types of modifications available to them in both the lecture and laboratory courses prior to assessments.

Cultural Leave Policy:
UM has a Cultural and Ceremonial Leave Policy: "Cultural or ceremonial leave allows excused absences for cultural, religious, and ceremonial purposes to meet the student's customs and traditions or to participate in related activities. To receive an authorized absence for a cultural, religious or ceremonial event the student or their advisor (proxy) must submit a formal written request to the instructor. This must include a brief description (with inclusive dates) of the cultural event or ceremony and the importance of the student's attendance or participation. Authorization for the absence is subject to approval by the instructor. Appeals may be made to the Chair, Dean or Provost. The excused absence or leave may not exceed five academic calendar days (not including weekends or holidays). Students remain responsible for completion or make-up of assignments as defined in the syllabus, at the discretion of the instructor."

Disruptive behavior
Students who are being disruptive in lecture by talking, texting or playing computer games will be asked to leave the classroom. Such behaviors impact the learning of other students in the classroom and will not be tolerated. Re-admittance to class is at the discretion of the instructor. Students are expected to be reasonably dressed, and respectful during the zoom meetings.

Evaluation Methods:
Your course grade will be determined by your performance in the course according to the following evaluation methods:

Grading System:
Final Grades will be based upon a total of 460 points. *Final grades will be computed from the total # of points earned /460.*

Lecture Graded Activity	**# of points toward grade**
Lecture Exams (4x80 pts)	320
LearnSmart	80
Peer Leader-led In class activities	60
Lecture Total	**460**

Grades will be calculated based upon the following system; grades will be rounded. (i.e. if a student earns 83.44%, their grade will round to 83% or a B-; if a student earns 83.45% their grade will be rounded to 84% or a B):

Grade	Percent of Total Points
A	94-100%
A-	90-93%
B+	87-89%
B	84-86%

B-	80-83%
C+	77-79%
C	74-76%
C-	70-73%
D+	67-69.4%
D	64-66%
D-	60-63%
F	59% and Below

Assessments:
Students are expected to complete exams in their entirety by the exam due date. Be prepared to take a 'closed book exam'. No outside materials, including (but not limited to) papers, notebooks, calculators, translators or cell phones are allowed during exams. Leaving during an exam is not permitted and if students opt to leave the exam prior to the end of the examination period, they must turn in their exam to be graded. Re-entry during exams is not permitted. Once an exam is begun, it must be completed in its entirety.

Students must present their photo ID at the time they turn in their exam to be graded. If a student does not show a photo ID at the time the exam is collected, the exam will not be graded and the exam will be assigned a grade of zero. More information on using the online proctoring system will be discussed during the first course meeting.

Quizzes
Approximately each week, students will be required to take lecture quizzes deployed online. Online quizzes will be taken through the MHE Connect online course supplement. Students are encouraged to work together to review the material covered in the quizzes, but individual students must submit their own work. Late submissions will not be accepted and there is no opportunity to make up missed quizzes. All online quizzes are available at the beginning of the semester but have defined due dates described later in this syllabus. Take special note of homework deadlines immediately following an exam as these will typically be due on a Monday instead of the typical Sunday.

LearnSmart adaptive homework assignments are graded based on mastery percent completion of the assignments. That means if you successfully master the material prior to the due date, you will receive 100% completion. If you miss an assignment you cannot make up the work. If you do not complete an assignment in its entirety, you will receive credit only for the work you complete.

Make-up Assignments:
NO "make-up" opportunities on missed assignments are available.

Assessment Review/Grade Disputes
Lecture Exam keys will be posted online after all students have completed the exam. It is the student's responsibility to review the exam keys and understand how they may have missed points. *Any disputes regarding test items or examination grades must be communicated by email or through the Moodle specific dropbox when appropriate within*

5 days after the exam has been returned to the class or as announced on Moodle. Under no circumstances will examination grades be reconsidered after this window. If a dispute should arise regarding the answer to a lecture or laboratory examination or other assessment item, the judgment of the faculty member will be final. Due to grading deadlines, the grade dispute window will be announced in with regard to the final lecture exam.

Make-up Examinations

If there is a documented extenuating circumstance that prevents the student from completing the exam by the deadline, the student must communicate that information to Dr. Minns ASAP. Once that documentation is received, Dr. Minns will determine a new deadline.

Correspondence

An official UM student email address must be used for all correspondence.

Undergraduate Peer Leaders:

There are several peer leaders who will assist with learning activities this semester. These peer leaders will also hold review sessions via Zoom.

Students interested in becoming a peer leader for future BIOH365, BIOH366, BIOH370, and BIOH371 courses may apply for a limited number of peer advisor positions in the Spring (the deadline is typically March 15). In order to be eligible to become a peer advisor, students must earn a grade of B or higher in BIOH365 and BIOH370 and must fill out an application. Promising candidates will be invited for an interview. Peer leaders are undergraduate students who enroll in BIOH480 or BIOH481 for assisting in laboratory instruction and BIOH463 and BIOH465 for assisting in lecture instruction. Peer leaders also participate in cadaver dissection. Interested candidates are encouraged to talk with Dr. Minns, laboratory instructor and their current peer advisors.

COVID-19 Safety Protocols

1) Review the University of Montana policies and suggestions surrounding Covid-19. They can be found at the following link: https://www.umt.edu/coronavirus/coronavirus_faqs.php
2) You must wear a cotton face covering (preferably one that has double-layered fabric) in all UM buildings and when outside distancing cannot be maintained.
3) Maintain a 6-ft distance between other people at all times.
4) If you are experiencing an symptoms of Covid-19, contact Dr. Minns and *stay home.* You are capable of completing this class with no loss of points remotely.
5) Keep in mind that your behavior and social patterns outside of class can make you more likely to come in contact with Covid-19. Please be conscientious of your social interactions and practice social distancing and good hygiene outside of the classroom.

Important Dates and Assigned Readings (this may be amended by Dr. Minns during the Semester)

Day of Week	Dates	Monday	Readings McKinley
Wednesday	Aug. 19	An Introduction to the Human Body	Chapter 1
Friday	Aug. 21	An Introduction to the Human Body	Chapter 1
Sunday	Aug. 23	LearnSmart Chap. 1 Assignment due	
Monday	Aug. 24	An Introduction to the Human Body	Chapter 1
Wednesday	Aug. 26	Chemistry Review: Biologically relevant molecules (Chemistry will not be covered in depth in Lecture but you are responsible for comprehending all material in the text)	Chapter 2
Friday	Aug. 28	Chemistry Review: Biologically relevant molecules	Chapter 2
Sunday	Aug. 30	LearnSmart Chap. 2 Assignment due LearnSmart Chap. 3 Assignment due	
Monday	Aug. 31	Enzymes and metabolism	Chapter 3
Wednesday	Sept. 2	Biology of Cell	Chapter 4
Friday	Sept. 4	Biology of Cell	Chapter 4
Sunday	Sept. 6	Learnsmart Chap. 4 due Learnsmart Chap. 11 due (Chap. 11 is to help prepare you for the lab)	
Monday	Sept. 7	Labor Day- no class	
Tuesday	Sept. 8	Peer Leader Pre-Activity #1 Due 11:59pm	
Wednesday	Sept. 9	**Peer Leader Activity #1**	
Friday	Sept. 11	Biology of the cell	Chapter 4
Sunday	Sept. 13	Lecture Exam 1 DUE by 11:59pm MST	Chapters 1-4
Monday	Sept. 14	LearnSmart Chap. 5 due Tissue Organization	Chapter 5
Wednesday	Sept. 16	Tissue Organization	Chapter 5
Friday	Sept. 18	Tissue Organization	Chapter 5

Sunday	Sept. 20	LearnSmart Chap 6 due	
Monday	Sept. 21	Integumentary System	Chapter 6
Tuesday	Sept. 22	Peer Leader Pre-Activity #2 Due 11:59pm	
Wednesday	Sept. 23	**Peer Leader Activity #2**	
Friday	Sept. 25	Skeletal System: Bone Structure and Function	Chapter 7
Sunday	Sept. 27	LearnSmart Chap. 7 due	
Monday	Sept. 28	Skeletal System: Bone Structure and Function	Chapter 7
Wednesday	Sept. 30	Skeletal System: Bone structure and function	Chapter 7
Friday	Oct. 2	Skeletal System: Axial and Appendicular Skeleton	Chapter 8
Sunday	Oct. 4	LearnSmart Chap. 8 due LearnSmart Chap. 9 due	
Monday	Oct. 5	Skeletal System: Axial and Appendicular	Chapter 8
Tuesday	Oct. 6	Peer Leader Pre-Activity #3 Due 11:59pm	
Wednesday	Oct. 7	**Peer Leader Team Activity #3**	
Friday	Oct. 9	Muscle Tissue	Chapter 10
Sunday	Oct. 11	LearnSmart: Chap. 10 due	
Monday	Oct. 12	Muscle Tissue	Chapter 10
Wednesday	Oct 14	Muscle Tissue	Chapter 10
Friday	Oct. 16	Muscle Tissue	Chapter 10
Sunday	Oct. 18	Lecture Exam 2 Due by 11:59pm MST	Chapters 5-10
Monday	Oct. 19	LearnSmart Chap. 12 due Nervous System: Nervous Tissue	Chapter 12
Tuesday	Oct. 20	Peer Leader Pre-Activity #4 due 11:59pm	
Wednesday	Oct. 21	Peer Leader Team Activity #4	Chapter 12
Friday	Oct. 23	Nervous System: Nervous Tissue	Chapter 12
Sunday	Oct. 25	LearnSmart Chapter 13 due	
Monday	Oct. 26	Nervous System: Brain and Cranial Nerves	Chapter 13
Tuesday	Oct. 27	Peer Leader Pre-Activity #5 Due 11:59pm	

Wednesday	Oct. 28	**Peer Leader Team Activity #5**	
Friday	Oct. 30	Nervous System: Brain and Cranial Nerves	Chapter 13
Sunday	Nov. 1	LearnSmart Chapter 14 due	
Monday	Nov. 2	Nervous System: Brain and Cranial Nerves	Chapter 13
Tuesday	Nov. 3	Peer Leader Pre-Activity #6 Due	
Wednesday	Nov. 4	**Peer Leader Team Activity #6**	
Friday	Nov. 6	Nervous System: Spinal Cord and Spinal Nerves	Chapter 14
Sunday	Nov. 8	Exam 3 due by 11:59pm MST	Covers 12, 13, 14
Monday	Nov. 9	LearnSmart Chapter 15 due Nervous System: Autonomic Nervous System	Chapter 15
Wednesday	Nov. 11	Veteran's Day- no class Thank you for your service!	Chapter 15
Friday	Nov. 13	Nervous System: Autonomic Nervous System Nervous System: Senses	Chapter 16
Sunday	Nov. 15	LearnSmart Chapter 16 due	
Monday	Nov. 16	Nervous System: Senses	Chapter 16
Tuesday	Nov. 17	Nervous System: Senses	Chapter 16
Wednesday	Nov. 18	Nervous System: Senses	Chapter 16
Friday	Nov. 20	Final Exam due by 11:59pm MST	Cumulative: Chapter 1-10; 12-16