

Prerequisites - BL 201 & 201L**Instructor** - Dr. Engle

Office - 211 Pierce Hall

Phone - 886-6552

Email - JEngle@mtaloy.edu

Office Hours - MWF 12-2 TR 12-1

Credit Hours - 3

Lecture - Monday 5:30 - 8:20

003 Pierce Hall

Final - Day 1, Monday 7 December, 8:00-10:00

Web page - <http://DrEngle.net>

Text - OpenStax Anatomy & Physiology Textbook FREE via OpenStax. It is required reading, but the hard copy version is optional. You can download the text free. ISBN: 9781711494067
<https://openstax.org/details/books/anatomy-and-physiology>

Course description - A continuation of BL 201 that presents the structure and maintenance functions of the cardiovascular, lymphatic, respiratory, digestive, and urinary systems. Control of function by the endocrine and autonomic nervous systems is explored. The reproductive systems and special senses are included.

Grading Policy:

Exams - will be administered at the beginning of the next class following every chapter. Generally there will be an exam at the beginning of every class. Exams will consist of multiple choice, matching, and short written answers. Exams will be based primarily on lecture material.

Homework - Weekly online homework must be completed by the due date. To access the homework you will need an access code. To get to the homework log onto Canvas -> A&P II course -> Assignments -> Homework assignments. Generally the homework assignments are due every Sunday at midnight. Homework points are applied to your grade the same as an exam question. (A point is a point is a point.)

Grading Scale:

A=100-92% B+=91-88% B=87-83% C+=82-79% C=78-74% D=73-65% F=64-0%

Grades are NOT curved and there is no extra credit available. Grades are based on the total amount of points accumulated. To calculate your grade add your total number of points correct. Divide by the number of total points available. Multiply by 100 to obtain your percent score.

Other grades (E, W, WP, WF) will be assigned as described in the College Catalog.

Tutoring Help - in addition to meeting with the instructor, the college provides FREE tutoring services to students:

- The Health Studies Tutor Cara Tomallo available weekday from 8:30 am to 5:00 pm.
- Professional and Peer tutoring available through the Learning Commons (814)-886-6566 located on the first floor of the library
- Schedule tutoring sessions or view drop in hours at the learning commons website:
<https://www.mtaloy.edu/library/peer-professional-tutors/>

Additional Resources:

- Library Resources <https://libguides.mtaloy.edu/anatomy>
- Zygote body 3D anatomy: <https://www.zygotebody.com/#>
- University of Washington, Comparative Vertebrate Anatomy page, several nice resources including some photos of dissections:
http://courses.washington.edu/chordate/453photos/gut_photos/mammal_digestive_photos.htm
- Muscle functions: <http://biology.kenyon.edu/heithausp/cat-tutorial/function/function.htm>
- Sheffield, S. 2019. Get Body Smart. <http://www.getbodysmart.com>
- Crash Course Anatomy & Physiology on YouTube

Course Outline and Learning objectives	Chapter
Week 1 - 24 August - Somatic Nervous System Describe how the somatic nervous system incorporates into the nervous system Explain how the special senses operate	14
Week 2 - 31 August - Muscle Physiology Detail the cellular structure of muscle Explain the steps in muscle contraction	10
Week 3 - 7 September - No class, Labor Day	
Week 4 - 14 September - Muscle Anatomy Define insertion and origin Describe the layering of muscles	11
Week 5 21 September - Blood Describe the structure and function of the erythrocyte Distinguish the different circulating leukocytes Explain the different blood types in terms of donor & recipient	18
Week 6 - 28 September - Heart Explain the pathways of the pulmonary & systemic circuits Describe the anatomy of the heart Relate how the heart rate is controlled	19
Week 7 - 6 October - Blood Vessels Compare the structure of arteries and veins Identify the major vessels of the circulatory routes Describe physiology of blood flow	20
Week 8 - 12 October - No class, Long Weekend	
Week 9 - 19 October - Lymphatic & Immune System Describe the lymphatic system anatomy List the major functions of the lymphatic system Explain the functioning of the different parts of the innate defenses Describe the humoral immune response	21
Week 10 - 26 October - Respiratory system Identify the components of the respiratory system Explain the mechanics of breathing Explain how the gases are exchanged between the blood & lungs	22
Week 11 - 2 November - Digestive System Identify the organs of the digestive system Explain how macromolecules are broken down to molecules mechanically and chemically	23
Week 12 - 9 November - Nutrition & Metabolism Relate the pathways of carbohydrate cellular respiration Explain how lipids are metabolized Explain how body temperature is regulated	24
Week 13 - 16 November - Urinary System Identify the organs and their functions of the urinary system Explain the processes in urine formation	25
Week 14 - 23 November - Reproductive System Identify the anatomy of the male and female reproductive system Explain the ovarian cycle and its regulation by hormones Describe the process of spermatogenesis and oogenesis	27
Week 15 - 30 November - Catch up & Review	
Week 16 - 7 December - Final Cumulative Exam	

In addition to the above policies and procedures, the instructor reserves the right to alter, augment, or delete from existing policies if in so doing the proper atmosphere for teaching and learning is maintained. All such policy changes will be announced.

MAC Policies

The following are available on my web site (Classes page) and (maybe more up-to-date policies) on Canvas -> Mount Resources (lower left) -> Syllabus Statements & Policies

- Weather Delays and Compressed Schedule
- Technology and Communication Assistance Statement
- College Academic Integrity Statement
- College Accommodations Statement
- Conflict Resolution Statement
- Title IX: Confidentiality and Responsible Employee Statement
- Notice of Non-Discrimination Statement

Additional Policies:

Attendance Policy

Attendance at all lecture and lab sessions is mandatory. It is your responsibility to notify the instructor prior to missing an exam or laboratory and you must have a valid reason. The instructor reserves the right to judge the validity of the excuse. If you miss an exam, you are responsible for taking the exam within one week of your return. There are no makeup labs unless you are able to come to another section during the same week and obtain instructor permission. Failure of the student to follow the steps outlined above will result in a grade of "0" for the missed exam or lab!

Department specific Conflict Resolution

Should a student encounter difficulty with course content or other aspects of the course, the first action should be to make an appointment to speak with the instructor. The instructor may suggest resources on campus or other tips to assist student learning. If a student has concerns with their instructor, then the best course of action is to seek out a meeting with the Science and Mathematics Department Chair, Dr. Crystal Goldyn, 814-886-6534, CGoldyn@mtaloy.edu. to discuss the difficulties. If an agreeable decision is not reached, the student should then request a meeting with the Dean, Dr. Chris Lovett, 814-886-6458, CLovett@mtaloy.edu. The Faculty, Department Chairs, and Deans are committed to treating all students with respect and fairness. Additional information is outlined in the academic grievance policy in the College catalog.