BIOL2402.101HY
Anatomy and Physiology II
Spring 2021
Face-To-Face Lab Meetings in Science Building (#9) Room 143
Mondays 8:00 am – 10:50 am

Instructor Information: Dr. Jennifer Bieszke, jbieszke@com.edu, (409) 933-8332
Student hours and location:
Monday from 11:00 am until 12:30 pm in MS143
Tuesday and Thursday from (9:30am – 11:00am) in either MS-142 or Atrium in Building #9
On-line Blackboard Collaborate Wednesday (11:00 am – 12:00 pm)
I will also be available for immediate response via email from 11:00 am until 12:00 pm on Tuesday and Thursdays. Any other form of email will receive a response within 24 hours.

Required Textbook/Materials:

(etext) Marieb, E.N. & Hoehn, K., 2019. Human Anatomy and Physiology, 11th edition, Boston, MA; Pearson Education, Inc. bundled with MODIFIED Mastering A&P on-line component. ISBN-13: 9780134763415. **These required materials listed above were purchased at the time of registration and you will gain access to these in Blackboard when classes begin. These items are required and you cannot choose an option to discontinue their use.**

(Lab Manual) Amerman, E., 2017. Exploring Anatomy & Physiology in the Laboratory, 3nd edition. Englewood, Colorado, Morton Publishing Company (customized for College of the Mainland) ISBN-13: 978-1-61731-955-6

Course Description: Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

PREREQUISITES: CPT Reading 78/READ 0370 and BIOL 2401 ("C" or better).

Course requirements:
Lecture Exams & Final Exam
All Exams will be on-line and you are required to use the Respondus Lockdown Browser to take the first quiz and all exams. All exam will be timed and will consist of the following format. Short-answer, essay, matching, multiple choice, T/F and diagram identification. Short-answer and Essay will be worth 50% of the test. In order to prepare you for the Final Exam which will have a cumulative part of the exam, each successive test in the course will contain material from the previous test to help with retention of material. If you experience technical difficulty when taking an on-line test and the test is not completed, please contact me. If I can verify the technical difficulty that interfered with completion of the exam, I can reset test if the due date has not passed.

Quizzes
You will have **four quizzes** that are found in Blackboard in the Quizzes tab. Each quiz consists of 2 short-answer, 2 multiple choice question and a matching section. You will have 30 minutes to answer these questions. Quizzes will be assigned the week before an upcoming exam. The first quiz will be taken using the Lockdown Browser to ensure you are familiar with the use of this software for the upcoming tests. If you experience technical difficulty, please contact me. If I can verify the technical difficulty, I can reset quiz if the due date has not passed. I advise you to try and take the quiz earlier in the week vs. the last hour on the Due date! Quiz due dates are listed in the schedule below.

Lecture Assignments
These assignments are found in the Pearson Mastering tab in Blackboard where you will have to click on the Assignment Button to see the list of Mastering A&P assignments. These assignments are designed specifically to help you learn and think critically about the lecture material.

Multiple Posts in Discussion Forums
You will have five discussion forums where you are going to have to make an initial post to the discussion forum. This post will have specific criteria that you must meet when making your post. You will also have to make a second post to another student's post to extend the discussion further in a positive manner. It is important to recognize if wrong information is being posted but please be respectful of others when notifying a person of mis-informing information.

Lab Assignments

FTF Lab Assignments
These assignments will be based on the Exercises that come from your lab manual or handouts posted in Blackboard. Make sure to bring these to class as they will be either completed during the FTF lab meeting or the basis of an assignment that must be turned in at the end of the lab session.

DRY Lab Assignments
These assignments may be either part of Mastering A&P and or associated with your lab manual. All assignments will be posted in Blackboard and must be completed by the Due dates posted in the syllabus. These assignments will follow the same guidelines as lecture assignments written above.

Laboratory Safety Quiz
You will have one laboratory quiz. This quiz is over laboratory safety. You will learn about laboratory safety in our first in-class laboratory meeting. You must complete the on-line safety quiz before coming into the lab the next week to demonstrate your understanding and retention of laboratory safety. Please see the DUE date in Schedule that follows

Lab Practicals
Two lab practicals will be administered on-line and you are required to use the Respondus Lockdown Browser to take both lab practicals. These exams will be timed and will consist of the following format. Identification of Specific Anatomical features using pictures and diagrams as well as answering questions regarding the physiology of organ systems as learned in the Laboratory Exercises.

Determination of Course Grade/Detailed Grading Formula:

Course Assessment	Total Points	Percentage of Course
LECTURE PORTION	**700**	**70.0%**
Lecture Assignments (9)	90 (10 points each)	9.0%
Lecture Exams (3)	300 (100 points each)	30.0%
On-line Quizzes (4)	80 (20 points each)	8.0%
Discussion Forums (5)	50 (10 points each)	5.0%
Final Exam	180	18.0%
LABORATORY PORTION	**300**	**30.0%**
FTF Lab Assignments (7 Assignments)	105 (15 points each)	10.5%
Dry Lab Assignments (6 Assignments)	30 (5 points each)	3.0%
Laboratory Safety Quiz	15 (10 (on-line + 5 in-class)	1.5 %
Lab Practicals (2)	150 (75 points each)	15.0%
TOTAL POINTS	**1000**	**100%**

Grading Scale (BASED ON POINTS):

A A Sum of the points earned for course assessments that equals between 900 and 1000 points
B A Sum of the points earned for course assessments that equals between 800 and 899 points
C A Sum of the points earned for course assessments that equals between 700 and 799 points
D A Sum of the points earned for course assessments that equals between 600 and 699 points
F A Sum of the points earned for course assessments that equals below 600 points.
I An incomplete may be assigned at the discretion of the instructor in accordance with the policy.
W A withdrawal may be assigned in accordance with college policy.

Lab Science Policy
This course consists of both a lecture and laboratory grade component. Students must earn a 70% or better in the laboratory component to successfully pass the course. Earning less than 70% in the laboratory component will result in an F for the course regardless of the lecture grade. Passing the laboratory component and failing the lecture component will not guarantee a passing grade for the course. Deviations from this policy will be at the sole discretion of the instructor.

Late Work, Make-Up, and Extra-Credit Policy:

***LECTURE EXAM AND LAB PRACTICAL MAKE-UP POLICY*:** No make-up opportunity will be allowed for missed exams unless there is documented extenuating circumstances such as illness or death in family.

***QUIZ MAKE-UP POLICY*:** No make-up opportunity will be allowed for on-line quizzes once the due date has passed unless you can provide documentation for an **emergency** that keeps them away from taking the quiz that is approved by me, I will use the percentage of the upcoming test grade to calculate the quiz score. I will only allow this once during the semester.

***DISCUSSION FORUM AND MASTERING A&P LECTURE AND DRY LAB ASSIGNMENTS MAKE-UP POLICY*:** No make-up opportunity will be allowed for these assignments unless there is a documented extenuating circumstances such as illness or death in family.

NO MAKE-UP POLICY for FTF LAB ASSIGNMENTS -attendance is required! Failure to complete the laboratory safety quiz by the due date will prohibit your entrance into the lab after the due date.

Attendance Policy:
You will need to maintain a presence in the on-line format and submit your assignments according to the schedule below. Failure to submit assignments on time will serve as the assessment for attendance in the on-line format.

A student is required to come to lab to complete the face-to-face laboratory exercises required in the laboratory component of this course. Absences in two required lab meetings will result in a "F" for the course grade unless there is a documented excuse approved by the instructor (e.g. illness or death in the family).

STAY HOME IF YOU FEEL SICK– As stated in the COM Spring 2021 Covid19 Guide, If you are feeling sick in any way, you need to stay home. Contact your instructor to address your absence and do not come on campus while you are ill. Failure to comply with this will result in you being asked to leave campus and can be considered disciplinary matter.

TARDY POLICY: Tardiness may result in an absence if not present when attendance is taken and may prevent you from participation in lab experiments or examinations.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. (Faculty may add additional statement requiring monitoring and communication expectations via Blackboard or other LMS)

Student Learner Outcome (SLO)	**Maps to Core Objective(s)**	**Assessed via this Assignment**
1. Use anatomical terminology to identify and describe locations of major organs of each system covered.		Lab Practical 2
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.		Lecture Assignment 9
3. Describe the interdependency and interactions of the systems.		Discussion Assignment 4
4. Explain contributions of organs and systems to the maintenance of homeostasis.	**Critical Thinking**	**Lecture Assignment 8**
5. Identify causes and effects of homeostatic imbalances.	**Communication Skills**	**Discussion Assignment 3**
6. Describe modern technology and tools used to study A&P		FTF Lab Assignment 3
7. Apply appropriate safety and ethical standards.		Lab Safety Quiz
8. Locate and identify anatomical structures.		FTF Lab Assignment 7
9. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.		FTF Lab Assignment 4
10. Work collaboratively to perform experiments.	**Teamwork**	**FTF Lab Assignment 4**
11. Demonstrate the steps involved in the scientific method.		FTF Lab Assignment 6
12. Communicate results of scientific investigations, analyze data and formulate conclusions.		FTF Lab Assignment 6
13. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations, and predictions.	**Empirical & Quantitative Skills**	**FTF Lab Assignment 6**

Academic Dishonesty: Disciplinary actions will be taken for students who exhibit disorderly conduct, cheat on exams, submit plagiarized work (see below), or are involved in collusion (helping others cheat or plagiarize) as defined in the Student Handbook under the heading, "Discipline and Penalties." The maximum penalty imposed for violations will be an F in the course. The student will also be referred to the Associate Vice President of Student Success and Conduct for further disciplinary action. Please read through the "Standards of Student Conduct" in the Student Handbook for a more complete discussion of these issues and your rights and responsibilities.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please Sheena Abernathy, Chair of the Science Department, at 409-933-8330 or by email: sabernathy@com.edu.

Course outline (tentative)**: Know your GROUP Assignment posted in "READ MY FIRST" Tab**

Week	Dates	Learning Module Topics	Laboratory - Components
1	**1/19 to 1/24**	Ch16: Endocrine System **DUE 1/24/21 Lecture Assignment 1** **DUE 1/27/21 Discussion FORUM 1**	**ON-LINE Safety Quiz** **DUE Sunday, 1/24/21**
2	**1/25 to 1/31**	Ch18: The Cardiovascular System: The Heart **DUE 1/31/21 Lecture Assignment 2**	**IN-CLASS Safety Quiz, DUE 1/25/21** **FTF LAB 1- DUE 1/25/21** (Endocrine Histology Split lab time) GROUP 1- 8:00 am – 9:20 am GROUP 2- 9:40 am-10:50 am
3	**2/01 to 2/07**	Ch19: The Cardiovascular System: Blood Vessels **DUE 2/07/21 Lecture Assignment 3**	**GROUP 1 – FTF LAB 2** **EX.17-1 Heart Anatomy & Dissection** **DUE 2/01/21** **GROUP 2 – DRY LAB 1** **Heart Anatomy & Auscultation** **DUE 2/08/21**
4	**2/08 to 2/14**	**DUE Wed. 2/10/21 Quiz 1 (Ch 16, 18, 19)** **DUE Fri. 2/12/21 Exam 1 (Ch 16, 18, 19)**	**GROUP 2 – FTF LAB 2** **EX.17-1 Heart Anatomy & Dissection** **DUE 2/08/21** **GROUP 1 – DRY LAB 1** **Heart Anatomy & Auscultation** **DUE 2/08/21**
5	**2/15 to 2/21**	Ch17: Blood **DUE 2/21/21 Lecture Assignment 4**	**GROUP 1 – FTF LAB 3** **EX.19-5 ECG & Vernier ECG Handout** **EX. 18-1 & 18-2 Arteries and Veins** **DUE 2/15/21** **GROUP 2- DRY LAB 2** **Pulse and Blood Pressure** **DUE 2/22/21**
6	**2/22 to 2/28**	Ch 21: The Immune System: Innate and Adaptive Body Defenses **DUE 3/07/21 Lecture Assignment 5** **DUE 2/28/21-Discussion FORUM 2**	**GROUP 2 – FTF LAB 3** **EX.19-5 ECG & Vernier ECG Handout** **EX. 18-1 & 18-2 Arteries and Veins** **DUE 2/22/21** **GROUP 1- DRY LAB 2** **Pulse and Blood Pressure** **DUE 2/22/21**
7	**3/01 to 3/07**	Ch 20: The Lymphatic System and Lymphoid Organs and Tissues	**GROUP 1 – FTF LAB 4** **Exercises 20-1: Formed Elements of Blood,** **20-2: ABO and Rh Blood Groups,**

		DUE 3/07/21-Lecture Assignment 5 (cont')	**20-3: Murder Mystery Game** **DUE 3/01/21**
			GROUP 2- DRY LAB 3 **Lymphatic System Anatomy** **Due 3/08/21**
8	**3/08 to 3/14**	**DUE WED. 3/10/21 Quiz 2 (Ch 17, 20, 21)** **DUE FRI 3/12/21 Exam 2 (Cumulative)**	**GROUP 2 – FTF LAB 4** **Exercises 20-1: Formed Elements of Blood,** **20-2: ABO and Rh Blood Groups,** **20-3: Murder Mystery Game** **DUE 3/08/21**
			GROUP 1- DRY LAB 3 **Lymphatic System Anatomy** **Due 3/08/21**
			DUE 3/14/21 Lab Practical 1
SPRING BREAK 3/15/21- 3/21/21			
9	**3/22 to 3/28**	Ch 22: The Respiratory System **DUE 3/28/21 Lecture Assignment 6**	**GROUP 1-FTF LAB 5** **Ex.22-1 Respiratory Anatomy and Lung Handout** **Ex. 24-1 Digestive Anatomy** **Ex. 2-3 Digestive System- Lipid Enzyme Digestion** **DUE 3/22/21**
			GROUP 2- DRY LAB 4 **Respiratory System (Spirometry) and Digestion (Protein and Starch)** **DUE 3/29/21**
10	**3/29 to 4/4**	Ch23: The Digestive System Ch24: Nutrition, Metabolism, and Energy Balance **DUE 4/04/21 Lecture Assignment 7** **DUE 4/04/21 Discussion FORUM 3**	**GROUP 2-FTF LAB 5** **Ex.22-1 Respiratory Anatomy and Lung Handout** **Ex. 24-1 Digestive Anatomy** **Ex. 2-3 Digestive System- Lipid Enzyme Digestion** **DUE 3/29/21**
			GROUP 1- DRY LAB 4 **Respiratory System (Spirometry) and Digestion (Protein and Starch)** **DUE 3/29/21**
11	**4/5 to 4/11**	**DUE WED 4/07/21 Quiz 3 (Ch 22, 23, 24)** **DUE FRI 4/09/21 Exam 3 (Cumulative)**	**GROUP 1 – FTF LAB 6** **Ex. 25-1 Kidney Dissection & Models** **Ex. 26-1 Glomerular Filtration** **URINALYSIS HANDOUT** **DUE 4/5/21**
			GROUP 2- DRY LAB 5 **Fluid Balance** **DUE 4/12/21**
12	**4/12 to 4/18**	Ch 25: The Urinary System **DUE 4/18/21 Lecture Assignment 8**	**GROUP 2 – FTF LAB 6** **Ex. 25-1 Kidney Dissection & Models** **Ex. 26-1 Glomerular Filtration** **URINALYSIS HANDOUT** **DUE 4/12/21**
			GROUP 1- DRY LAB 5 **Fluid Balance** **DUE 4/12/21**
13			**GROUP 1- FTF LAB 7**

	4/19 to 4/25	Ch 26: Fluid, Electrolyte, and Acid-Base Balance **DUE 4/25/21 Discussion FORUM 4**	**Rabbit Dissection** **DUE 4/19/21** **GROUP 2 – DRY LAB 6** **Reproductive System Anatomy** **DUE 4/26/21**
14	**4/26 to 5/2**	Ch 27: The Reproductive System **DUE 5/02/21-Lecture Assignment 9**	**GROUP 2- FTF LAB 7** **Rabbit Dissection** **DUE 4/26/21** **GROUP 1 – DRY LAB 6** **Reproductive System Anatomy** **DUE 4/26/21**
15	**5/3 to 5/9**	Ch 28: Pregnancy and Human Development **DUE 5/09/21 Discussion FORUM 5**	**DUE 5/03/21 Lab Practical 2**
16	**5/10 to 5/12**	**DUE Mon. 5/10/21 Quiz 4** **DUE Wed. 5/12/21 Final Exam (Cumulative)**	

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook.<https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.* https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw is March 3rd for the 1st 8-week session, April 26 for the 16-week session, and May 5th for the 2nd 8-week session.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_N grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_N grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. Students are required to watch a training video, complete the self-screening, and acknowledge the safety guidance at: www.com.edu/selfscreen. In addition, students, faculty, and staff must perform a self-screening prior to each campus visit. Finally, students, faculty, or staff who have had symptoms of COVID-19, received a positive test for COVID-19, or have had close contact with an individual infected with COVID-19 must complete the self-report tool.