***Anatomy and Physiology (Biology 212; 2020)***

***REVISED Distance Education Course Syllabus:***

***Instructor: Ted Wilson PhD Office:232 Pasteur Hall (if WSU permits faculty or students to access facilities) Phone: 507-457-2485***

***BEST CONTACT METHOD: Email:*** [***twilson@winona.edu***](mailto:twilson@winona.edu)

**For Course Content at Normal Website:** [**http://course1.winona.edu/twilson**](http://course1.winona.edu/ewilson)

**For Assignment submission and Testing use the AP212 D2L website you should have access to if enrolled in this course!**

**Textbook: ): *Saladin, KS: Anatomy and Physiology 8th Edition (available new at bookstore with electronic access loose leaf about $120)-hardback cover is best***

***Note: Saladin 7th Edition is nearly equivalent*** for only about $16 delivered ***via Clegg.com, Amazon.com or other book website.*** Chapter sequence and content of these two books is almost identical, though the page numbers and figures may be slightly different. While only the 8th edition has online support, I find that my students benefit most from studying lecture content and book, not the publisher website.

**Course Description:** This is the second half of a year-long sequence of anatomy and physiology designed for health sciences bound students. This course emphasizes the physiology of organ systems and how the systems interact with each other in health, disease and ultimately death. Specifically we will examines the function and interactions of the circulatory, respiratory, renal, endocrine, digestive and reproductive systems. A lot of what we do in this second semester involves using information learned in the first semester, hence A and P 211 is a prerequisite and we will not review things covered in 211.

**Grades and Percentages:**

**PRE-SPRING BREAK A=+90% B=+80% C=+70% D=+60% F=under 60%**

**Post Spring Break/COVID and switch to online only delivery:**

**Grading for points available after spring break are largely hand it in to a D2L Dropbox and earn the points.**

**There will be one lab test, one unit lecture test, and (probably) one final exam. These will be open book/open note tests because there is not good way to be sure they were not take using notes etc. The grading curve for points available AFTER-SPRING BREAK A=+90% B=+80% C=+70% D=+60% F=under 60% In fairness and I am not sure how this will work. I will try and keep the same grading percentages.**

**ALL materials and assignments MUST be handed into the D2L drop box by NOON on May 1. The syllabus below indicates due takes for each assignment, they need to be submitted to my AP212 D2L drop box by 5pm on the day indicated, if late 3 points will be deducted (plan ahead-no exceptions for lack of online access etc).**

**Balance of points for remainder of semester:**

**Because we only completed half of the labs at WSU, I will take the best 4 of your 5 pre-lab quiz scores.**

**Pre Lecture Chapter Summaries (Chapters 22, 23, 24 and 25): 4 X 10 points**

**Lab Test 2 through D2L: ECG, Respiratory Anatomy, Spirometry and Exercise Physiology Labs- 50 points**

**Lecture Test 3 through D2L: Respiration, Urinary, Acid-Base/H2O Balance (CH 22,23 and 24)- 50 points**

**Spirometry Assignment- 10 points (a few student even handed this in BEFORE spring break)**

**Urinary system and kidney health assignment- 10 points**

**Lab Packet Assignments (Kidney, Digestion and Reproductive Labs)- 3 X 10 points**

**Semester Summary Assignment: 50 points (*no comprehensive final exam, unless the our University changes policy and requires that I give one).***

**I will honor the prior assignments that were handed in, and the tests taken up to the Start of Spring Break.**

**Now that we are post-COVID (WSU/MnSCU requires online delivery and assessment only) we need to change this.**

***Dr Wilson’s Special Note: I realize that some folks worked VERY VERY hard I the first half of this semester and earned outstanding grades. This class is one of my best in several years, and I am both proud of you and sad for the COVID change in plans. I decided to keep the grading curve the same for this last part of the semester. This “may” seem easier for the remainder of the semester, and hopefully it is. This is in part because I (like you) have no idea how the distance education thing and D2L testing will work. So I want to encourage everyone to “try” to make this learning model work, and this is the best way is to encourage everyone to give it a try. In the end we are rewarded for what we have learned to do in this class and how well we can apply this physiology to the patients we will see as RNs, Athletic Trainers, etc. Cheers! Dr Wilson***

***DISTANCE DELIVERY POST-COVID***

***Anatomy and Physiology 212: Lecture and Laboratory Schedule***

|  |  |  |
| --- | --- | --- |
| Week | Monday Wednesday Friday | **Laboratory Schedule** |
| 1/13 | Endocrine System | **Lab 1 Endocrine anatomy and function** |
|  | 17 17 17  If you did not carefully read about the autonomic nervous system in CH15 last semester, be sure to do so before reading CH 17. This lecture link may help with the review. | ***Please be sure to down load the Endocrine Lab BEFORE coming to lab next week.*** |
| 1/20 | Endocrine System and Blood | ***No Lab due to Monday Holiday*** |
|  | **No Lecture/lab MLK Jan 21st** 17 18  **If you have Monday lab make it up on Tue, Wed or Thur as open lab format**  ***FRIDAY: Endocrine assignment due in class*** | ***Don’t forget open lab.*** |
| 1/27 | Blood and the anatomy of the heart |  |
|  | 18 18 18  **MONDAY 20 pt quiz CH17 at end of lecture** | **Lab 2 Blood: collection and clinical analysis** |
| 2/3 | Cardiac function |  |
|  | **Wednesday Test #1: CH 17 and 18** | **Lab 3 Anatomy of Cardiovascular System** |
| 2/10 | Circulation |  |
|  | 19 19 19 | **Lab Exam #1: Thursday Endocrine, Blood, Cardiac Anatomy Labs** |
| 2/17 | Circulation  **Wednesday ECG Assignment Due (10 pts)**  *Friday 7am: ECG Help session in lecture room*  **Labs Continue on University Assessment Day** | **Lab 4 Cardiac Physiology** |
|  | 19 20 20 |  |
| 2/24 | Cardiovascular and Respiratory System | **Lab 5 Respiratory Anatomy.**  **Examine fresh porcine tissues** |
|  | 20 20  **Wednesday: 20 pt Quiz at end of lecture** |  |
| 3/ 2 | Respiratory System  **WEDNESDAY**  **Test#2: CH 19 and 20** | **Lab 6 Spirometry and Respiratory Physiology** |
|  | 22 Test 22 |  |
| Weeks of 3/9-3/29 | ***SPRING BREAK and COVID Additional Break*** | **Spring Break** |
|  | Respiratory System |  |
| 3/30  To  4/3 | ***We cannot hold the spirometry Help Session: WSU regulations***  Read CH 22 and answer the CH 22 Respiratory System 20 Testing Your Recall questions. Save an image of your answers as a pdf or take picture with camera then submit image to D2L (**10 points: Due Friday 4/3**).  Submission to D2L is a requirement BEFORE you can watch the two audio-powerpoint lectures (go to D2L). You can find the links to powerpoint (no audio) at my course1 website. **You Must Use D2L to view the animated lectures that I prepared. There are TWO animated powerpoint files, try writing lecture notes on the clean powerpoint, watch as many times as you like.**  **10pt Spirometry Assignment due: D2L Dropbox Wednesday 5pm.**  Late Assignments: deduct 3 points- submit ahead of time to avoid late penalties! | **Lab 7 Exercise Physiology Do This At Home and turn in assignment to D2L webpage. Prior email send out week of March 13. This will be due by Friday April 3 5pm**  Late Assignments: deduct 3 points- submit ahead of time to avoid late penalties! |
| 4/6  To  4/10 | Urinary System and regulation of water, salts, pH  Read CH 23 and answer the CH 23 Urinary System 20 Testing Your Recall questions. Save an image of your answers as a pdf or take picture with camera then submit image to D2L (**10 points; due Friday 4/10**) . Submission to D2L is a requirement BEFORE you can watch the two audio-powerpoint lectures (go to D2L). You can find the links to powerpoint (no audio) at my course1 website. **You Must Use D2L to view the animated lectures that I prepared. There are TWO animated powerpoint files, try writing lecture notes on the clean powerpoint, watch as many times as you like.** | **Lab Exam#2: This will be on Thursday April9th and taken through D2L in the morning. Details to be announced regardinG test delivery**  **See the Heart-ECG, Respiratory Anatomy, Spirometry, and Exercise Physiology labs for content. Test will be 25 questions about 6-7 que/lab packet (50 pts) Open Book** |
| 4/13  To  4/17 | Fluid, Electrolyte and Acid Base Balance  Read CH 24 and answer the CH 24 Testing Your Recall questions. Save an image of your answers as a pdf or take picture with camera then submit image to D2L (**10 points; due Friday 4/17**) . Submission to D2L is a requirement BEFORE you can watch the two audio-powerpoint lectures (go to D2L). You can find the links to powerpoint (no audio) at my course1 website. **You Must Use D2L to view the animated lectures that I prepared. There are TWO animated powerpoint files, try writing lecture notes on the clean powerpoint, watch as many times as you like.**  **10pt Kidney Assignment due in D2L Dropbox Friday 5pm.** | **Lab 8 Urinary anatomy- This will be a study at home packet where you hand in answers to the D2L drop box as a 10 point assignment (no lab exam content)**  **Due Friday 4/17** |
| 4/20  To  4/24 | **Monday: D2L Lecture Test (50 questions- 50 points) on Chapters 22, 23, and 24**  **Details to be announced regardinG test delivery**  Read CH 25 DIGESTION and answer the CH 25 Testing Your Recall questions. Save an image of your answers as a pdf or take picture with camera then submit image to D2L (**10 points; Due Friday 4/24**). Submission to D2L is a requirement BEFORE you can watch the two audio-powerpoint lectures (go to D2L). You can find the links to powerpoint (no audio) at my course1 website. **You Must Use D2L to view the animated lectures that I prepared. There are TWO animated powerpoint files, try writing lecture notes on the clean powerpoint, watch as many times as you like.** | **Lab 9 Anatomy and physiology of digestion- This will be a study at home packet where you hand in answers to the D2L drop box as a 10 point assignment (no lab exam content)**  **Due Friday 4/24** |
| 4/27 | Finish Digestion and last online notes for semester  **There is still a 50 point review assignment**: **D2L due date moved to Friday May 1st 11:59 pm**  What you have to do to EARN the 50 points: Hand-write a summary of **15 items you learned from each of the following 8 chapters**: 17-Endocrine, 18-Blood, 19-Heart Anatomy, 20-Circualtory System, 22-Respiratory System, 23-Urinary System, 24-Ph and Electrolyte Regulation, and 25-Digestion. ***EACH ITEM MUST CONTAIN AT LEAST 10 WORDS. Submit this file anytime on Friday May 1st to the D2L Dropbox by 5pm***  ***Please be sure to write this BY HAND (computer stuff is pretty easy to share and then copy paste right?)***  ***Use smaller writing so it fits tightly on a page. You can then take a photo with your cell phone, save it as a merged pdf, and compress the size to 5MB or less if needed prior to D2L submission***  ***I will have Final AP212 Content Review Lectures on Zoom 8am: Monday April 27th: Endocrine and Blood***  ***Wednesday April 29: Heart and Lung***  ***Friday May1st: Kidney, Homeostasis and Digestion***  ***Please look for the email link for each session*** | **Lab 10 Anatomy and physiology of reproduction This will be a study at home packet where you hand in answers to the D2L drop box as a 10 point assignment (no lab exam content)**  **Due Friday 5/1** |
| 5/4 | **Monday May 4th 8 to 9am**  **AP212 Final Exam: We do need a final exam to get folks to truly go back and remember what they have learned this semester, sorry to have to do this. In the past the test was 75 points-no cheat sheets allowed and student had two hours to take it. This year it will 50 points (52 questions; 1 pt/question multiple choice).** Final Exam will be delivered by D2L 8-9am (60 minute time limit), Respondus lockdown required (no online access), with question order randomized, but this D2L test will be open book and open note. The test will cover everything we have looked at this semester in CH 18, 19, 20, a tiny bit of 21, 22, 23, 24 and 25. There will be 6 or 7 questions from each chapter. **Test questions will be limited to** the practice quizzes/tests for each of these prior units, the practice final exam, and one question from each end of chapter questions. *I will change 1 to 3 words on most questions just to be sure folks have to “think” about the question and “think” about the answer. Life is about thinking, not memorizing.* | **NO FINAL LAB EXAM** |