Summer 2019

Course Name: BIO 121 Anatomy and Physiology II Laboratory

Credit hours: 2 quarter hours

Method of Delivery: eLearning

Students must participate each week by submitting substantial, gradable work for attendance. Notify the instructor about (un)expected issues that interfere with the assigned coursework.

Course Description: This laboratory component of Human Anatomy and Physiology II is a study of the specific structure and function of the human body beginning with the cell and stressing the chemical processes important in maintenance of homeostasis. The systems studied include sensory, endocrine, respiratory, digestive, cardiovascular, urinary, and reproductive. Concurrent enrollment in lecture course BIO 120 Anatomy and Physiology II is required

Prerequisite: BIO 110 and 111

Materials needed for this course:

- Textbook (buy the Connect e-book access code from the college bookstore)
- Lab handouts (download from each weekly folder in the BIO 121 Midstate eLearning)
- Lab manual (purchase from the college bookstore or from another source)
- Internet
- The college provides the student username and password for the BIO 121 Midstate eLearning course. Contact college's Technical Support for general computer issues and student questions about using the Midstate eLearning course menu tabs.

(1) Textbook: Hole's Human Anatomy & Physiology, 14th Ed, Connect 2 Semester Access Card

ISBN: <u>1259616371</u> from Midstate College Bookstore Authors: David Shier, Jackie Butler, and Ricki Lewis

Publisher: McGraw-Hill, 2016,

The textbook can be purchased as an ebook access code. Contact the Midstate College Bookstore if you don't have an access code to the Connect textbook website from a previous term (or BIO course). Students can also contact the college bookstore about using their financial aid to purchase the textbook access code.

Optional: Interested students can buy the 3- hole punched, loose leaf textbook version from McGraw-Hill Education by logging into the BIO Connect ebook website; look for the purchase menu tab under the textbook photo icon (right side of the web page) to buy with a credit card and have the item mailed directly to your address. Or rent/buy a new (or used) printed textbook from other sources.

(2) Lab Manual: Anatomy and Physiology Laboratory Manual, 10th Ed

ISBN: 9780323528924 from Midstate College Bookstore

Authors: Kevin T. Patton Publisher: Elsevier, 2019

Optional lab study resources: animation, glossary e-coloring book

new lab manuals should have lab access card https://evolve.elsevier.com/patton/ap/lab

(The lab manual access card is not linked with the Connect lab website.)

(3) Lab Handouts: Students will download lab handouts from the weekly folders in the Midstate elearning lab course. Students will submit weekly lab homework online.

Go to the college home page > Midstate elearning > Log in with college password.

Optional Self-Study Resource:

Anatomy Coloring Workbook, 4th Ed. Author: Alcarno/ Princeton Review

Publisher: Princeton Review Year Published: 2018

ISBN: 9780451487872

New Price: \$20.50 Prices are subject to change without notice.

How to obtain access to the BIO 121 Connect course textbook website:

View this tutorial link: <u>How to Register to Connect Tutorial</u>. Click on the "Next" menu tab under the web page. Contact the instructor about your textbook website registration questions.

The Connect access code is valid for 540 days (or 1.5 months) upon activation. Be sure to "Sign Out" (top right corner menu tab) of the Connect textbook website when you are registering for different Connect sections for the BIO courses. The college cannot resend, or reset, the Connect password.

Visit this website: Use this BIO 121 Connect registration link.

- 1. First time users of the Connect access code: Go to the BIO 121 Connect registration link provided (use the above hyperlink) to create your new Connect ebook password.
- 2. Students who have a Connect BIO password from a previous BIO course: Use the same Connect password to register for the BIO 121 Connect (use the above hyperlink). If you have logged into Connect before, then look for the "already registered" web page (under the "Welcome") to "Sign In" with your email and password as shown in slide #2 of the tutorial link above.

Click "My Courses" in the upper right corner to see the list of BIO courses you have access to Connect. Only students can reset their password to the Connect website.

Lab Topics: Microscope usage, endocrine system, heart, blood, blood vessels, cardiovascular physiology, lymphatic system, respiratory system, digestive system, urinary system, urinalysis and reproductive systems

Lab Learning Objectives: Upon completion of this course, the student will be able to:

- 1. Use a microscope to identify the structures of tissues and describe those structures using correct terminology.
- 2. Locate major body cavities and identify organs in each cavity, using an accepted dissection method.
- 3. Demonstrate knowledge of physiology and the understanding that structure determines function through performance of physiological tests such as blood pressure, urinalysis, respiratory function tests, blood tests and chemical digestion tests.

Midstate Grading scale:

90 - 100 A

80 - 89 B

70 - 79 C

60 - 69 D

0 - 59 F

Academic Integrity:

Academic integrity is a basic principle of the College's function. Midstate College students are expected to maintain a high level of academic honesty. Contrary actions may result in penalties such as failure of the assignment(s), a lesser grade on assignment(s), failure of the course and/or suspension from the College. The course instructor will review all submitted documents and supporting evidence in connection to the infraction. The course instructor will also review the student's personal file for other notifications of academic dishonesty before determining the level of action to be applied. The course instructor will complete the Academic Dishonesty Report form to document and describe the incident and actions taken, then kept on file. The student may appeal the decision to administration, whose decision will be final.

The following (plagiarism, cheating, deception, sabotage, computer misuse and copyright infringement) are included in the actions Midstate College considers behavior contrary to the academic integrity policy; however, the policy is not limited to these examples. Further discussion of consequences regarding academic dishonesty are addressed in the Student Handbook.

Plagiarism:

Plagiarism is using another person's words, either by paraphrase or direct quotation, without giving credit to the author(s). Plagiarism can also consist of cutting and pasting material from electronic sources by submitting all or a portion of work for assignment credit. This includes papers, computer programs, music, sculptures, paintings, photographs, etc. authored by another person without explicitly citing the original source(s). These actions violate the trust and honesty expected in academic work. Plagiarism is strictly against the academic policy of Midstate College. Its seriousness requires a measured, forceful response which includes consequences for inappropriate and/or no citation.

In courses containing writing assignments, the College promotes the use of Turnitin which compares the student's writing against previously submitted papers, journals, periodicals, books, and web pages. Students and instructors can use this service to reduce the incidence of plagiarism. This electronic resource has been found to conform to legal requirements for fair use and student confidentiality. It is able to provide a report to the student indicating the parts of the assignment that match.

Student Success and Tutoring:

Contact Student Success: Room 110; (309) 692-4092, ext. 1100; studentsuccess@midstate.edu;

The Office of Student Success offers help in the following areas:

- Tutoring: Tutoring is encouraged for students who are doing their best to complete assignments yet are experiencing difficulty in this course. Tutoring may be provided by the instructor outside of scheduled class times or through the office of Student Success.
- Writing assignment assistance: This may include learning how to conduct research; using proofreading tools such as Turnitin; outlining a topic; and applying MLA/APA standards.
- Math, accounting, and computer skills (including file management).
- Test-taking techniques.
- Note-taking skills development.
- Study skills development.
- Time management.

Instructor Information: Sharon Lee-Bond

Office Hours: By appointment so email the instructor to meet at the campus

E-mai: sleebond@midstate.edu

For questions and tutorials for Midstate eLearning (e.g., upload files) and the college email Dr. Leah Grebner, Director of Health Information Management Email lgrebner@midstate.edu Campus Phone 309-692-4092, extension 2340

Policies and Procedures:

- 1. All work is to be completed on time. The student will have one week to complete any missed quiz.
- 2. Il assignments are due 1 week after the scheduled lab activity at the beginning of the week Monday. If the assignments are not completed by the deadline, the grade will be recorded as zero.
- 3. Lab reports should be typed and in portfolio quality. Follow the template that you have been given. Lab reports are a one-person project.
- 4. Academic dishonesty is never tolerated and will be referred to the Dean.
- 5. If you don't understand instructions, ASK. Whenever you are unsure, ASK.
- 6. For students attending the on-campus lab classes (by appointment only in the summer):
 - a. Turn cell phones off during class. Calls can be returned during breaks. No text messaging will be allowed during class. Phones must not be handled during gloved laboratory experiences.
 - b. Bring a copy of the downloaded lab handout for each weekly class. Read the pertinent sections of the lab handout before each laboratory session.
 - c. Lab dissection specimens must not be removed from the lab.
 - d. Everyone must wear a lab apron and closed-toed shoes. Wear gloves/goggles when necessary. Tie back long hair while in the lab.
 - e. Wash your hands frequently. All OSHA requirements and safety precautions must be followed in all laboratory sessions especially in those labs involving body fluids.
 - f. Using the spray bottles on the tables which contain a bleach solution, clean your lab tables after each exercise.
 - g. Food and beverages (including anything bottled) are not permitted in the lab.

h. Due to the hazards in lab and abiding by the classroom protocol code establishing a learning environment for all registered students, children are not permitted to be in the lab.

Participation Requirements: Student must complete assignments online.

Students are required to make at least one *meaningful* post to the weekly discussion forum each week in addition to the completion of weekly lab assignments.

Excessive absence (2 or more weeks without participating) will hurt your performance and your ability to pass this class. In addition, students are expected to review other entries into the weekly discussion forum and *reply* to at least one other post.

Methods of evaluating student performance in the BIO 121 Midstate elearning course:

- Weekly online lab discussion activity
- Lab reports
- Lab handout questions
- Lab quizzes
- Final exam
- Weekly lab summaries

Grading Specifications for Laboratory:

	Total Points	960
Final Exam		100
Quizzes (5 at 40 points each)		200
Lab Questions (11 at 20 points each)		220
Lab Reports (11 at 20 points each)		220
Weekly Summaries (11 at 10 points each)		110
Participation in online discussions (11 at 10 p	oints each) 110	

Final Grade Scale: Total Required Points for Class = 960 Points

 A = 864 points or higher
 90 - 100%

 B = 768 - 863 points
 80 - 89%

 C = 672 - 767 points
 70 - 79%

 D = 576 - 671 points
 60 - 69%

 F = 575 points and below
 Below 60%

Instructor's Grading Scale: Schedule and Grade Specifications

Week	Dates (Mon start unless otherwise	Discussion Forums	Weekly Summaries	Lab Reports	Lab Questions	Quizzes	Final Exam
1	stated) No Mon day campus classes; Mon evening classes begin at 7: 30pm	10	10	20	20		
2	May 20 – Tues May 28 Tues May 28 – June 3	10	10	20	20	40 (Quiz 1)	
3	June 3 – 10	10	10	20	20		
4	June 10 – 17	10	10	20	20	40 (Quiz 2)	
5	June 17 - 24	10	10	20	20		
6	June 24 – July 1	10	10	20	20	40 (Quiz 3)	
7	July 1 – 8	10	10	20	20		
8	July 8 – 15	10	10	20	20	40 (Quiz 4)	
9	July 15 -22	10	10	20	20		
10	July 22 – 29	10	10	20	20	40 (Quiz 5)	
11	July 29 – Aug 5	10	10	20	20		

12	Submit the final exam by SUN, Aug 11 (12 noon midday)			100
				Total
				960
				points

Calendar Dates for Summer 2019 – Available link on the college home page (lower left corner).

Term Begins - Orientation	May 20 Monday
Evening Flex Classes	. May 20 Monday at 7: 30PM
Day Flex Classes Begin	. May 21, Tuesday
Midterm	Apr 1 - 7 (Week 6)
Last Withdrawal Date for "W" grade	. June 29, Saturday
Withdrawal Date Pass/Fail for "WP/WF" grade	July 20, Saturday
BIO 121 Lab Final Due Date	Aug 11, Sunday before 12 noon

Examination Information: Five (5) lab quizzes will be based upon the material covered since the last previous quiz. The final comprehensive exam is during week 12.

Test Format: The test format for this course will be a combination of multiple choice, short answer, and short essay. Although the tests are open book/note, preparation for the lab quizzes and the final exam is expected. If you have to look up each answer, you will not have time to complete the test since there are time limits for the lab quiz (50 minutes) and the final exam (2 hours). When studying for the exams, focus your time on the material covered in the notes and homework. Students will not be able to save their answers on the test and come back to it, so be sure to start the test when you have time that you can designate to taking it. If you forget to take a lab quiz or final exam and DID NOT MAKE PRIOR ARRANGEMENTS, you will receive a zero.

Lab Writing Assignments: Lab Reports and Lab Questions

Each lab report will include lab questions to answer and submit each week. Sometimes lab activity and/or lab questions may be assigned as homework using the Connect textbook website or the answers to the lab questions will be submitted with the lab report write up in the same file attachment to submit into Midstate eLearning BIO 121.

These lab reports should be answered in Microsoft Word and submitted as an attachment with the following naming convention: LastName_Lab Assignment Name BIO121

Both the lab handout questions and the lab report will be submitted in the same document file. An example of a homework file name is "Smith_Lab 1 Summary BIO121" or "Smith _Lab 1 Homework BIO 121." The assignments are due on Mondays at 7:59 AM unless otherwise noted.

Laboratory Course Documentation: Do not submit pages from the lab manual for grading.

- 1. Every student will record experiment observations and answer lab questions during each lab activity. Lab notes are evidence of a student's work and of the student's understanding of the concepts demonstrated in the experiments. Students should write neatly and try to express their thoughts clearly, concisely and completely so someone else could duplicate the results and you can use them to do your lab report.
- 2. Each week students will complete a laboratory report based upon their experiment notes, lab activities and lab handout. The lab report will include the title of the lab, purpose, procedure, data tables (if appropriate), observations, questions, and conclusions. A rubric will be used to grade.

Laboratory Report Format: Use your best formal English, complete sentences, paragraphs, and correct grammar and spelling.

Student's Name	Date of Experiment (or Date Submitted)
Title:	Use the same title of the exercise stated in the lab handout
Purpose: (e.g., The p	Write a brief statement about what the lab activities were designed to determine, or demonstrate, about human anatomy and physiology. Durpose of the lab was toThe lab demonstrated howwherewhy). If an experiment was performed, then also include the testable hypothesis
Procedure:	Briefly summarize what you did to complete the lab activities using the lab handout and other lab resources.
Observations:	What did you observe and learn? Write complete, descriptive sentences. If relevant, pictures, graphs or tables are excellent ways to organize observations, results and other information.

Conclusions: Did you achieve the purpose of the lab? Briefly explain why or why not. Also

describe anything that went wrong, what could have improved the lab, or what future experiments could be done and why. Also describe how (or why) the lab topics are useful to know in the real world. The conclusions should be based upon the lab homework answers, the weekly discussion

and assigned readings.

Lab Questions: Submit one document file containing (1) your answers to the lab handout

questions and (2) the lab report write up in into the Midstate eLearning.

Lab handout questions (20 points) and the weekly lab report (20 points) will be posted as one grade as "Lab homework" worth 40 points in the BIO gradebook.

Questions may be assigned within the lab handout, online Connect lab section, or in the lab manual. The questions are designed to help students think critically about the lab activities and the lab topics. Submit your answers to the lab handout questions with your lab report in the same document file online into the Midstate elearning website.

The lab report for each week will be graded according to the following lab sections:

20 Point Lab Report Write Up (5 Points for each section)					
Do no	Do not submit the lab report pages from the lab manual.				
Student Name, Date, Lab Title, Purpose/ Hypothesis	Procedures (Methods)	Visual Observations & Results	Conclusions & Real-World Applications		

Grading Rubric for BIO 121 Laboratory Reports

	Grading Rubric for BiO 121 Laboratory Reports
Points	
5	All the info is in the scientific format; is correct; no grammatical spelling errors
4	Most of the info is in scientific format; is correct, 1-2 grammatical or spelling errors
3	Some of the info is in a scientific format; is correct; 3-4 grammatical or spelling errors
2	Little info is presented in a scientific format; is correct; 5-6 grammatical or spelling errors
1	Does not state info in a scientific format; the info is incorrect or omitted completely; more than 6 grammatical or spelling errors

Discussion Forums: Topics and Questions

Weekly lab topics and discussion questions will require more thought. Although many of the questions do not have one correct answer, students must read the assigned textbook chapters, lab manual and supplemental lab handouts prior to making their initial discussion post. If specific facts are required to be posted and shared with the class, (internet) sources of information must be cited in APA style. Answers to questions that are either wrong or not supported will be graded appropriately. Students will be expected to post their answer prior to being able to review other responses.

The discussion forum will be available by 12:00 pm on Monday (Day 1) of the week.

Every week students are expected to post a meaningful response to the question posed by <u>Saturday, Day 6, 7: 59 am</u> Central Time, and then post a reply to another student's posting by Monday 7: 59 am (Day 7) unless otherwise stated.

Since the discussion forum will be closed weekly, any questions you have about information covered in the reading should be posted at the "Q and A cafe." This forum will not have a closed date.

Discussion question grading guidelines	
 Initial posting Answers the minimal requirements of the question without supporting evidence= 1 point Minimal posting with supporting evidence = 2 points Complete posting with supporting evidence (which may include APA citation) = 3 points 	3 points
Response to posting of a classmate • Posting the minimal requirements without supporting evidence = 1 point • Minimal posting with supporting evidence = 2 points • Complete posting with supporting evidence = 3 points	3 points

Correct spelling in postings for the week	2 points
Correct grammar in postings for the week	2 points
Total points per weekly discussion	10 points

Weekly Summary for Lab: The weekly summaries are an important part of the assessment for online learning in which instructors can assess the comprehension level of students.

- Please write a minimum of two (2)-paragraph summary about the lab learning objectives (see syllabus schedule) describing information covered in the unit, addressing information as requested in the overview.
- Each of the stated objectives in the weekly overview MUST be addressed individually. Simply restating the objectives does not fulfill this requirement.
- The last paragraph is your personal reflection: discuss two (2) topics you found to be personally relevant or informative describe what and why. It is fine to use the word "I" or "we."
- Spelling, grammar errors and incomplete summaries will result in point deductions.

Save the assignment as "Last Name- Week X-Summary BIO121" such as "Smith_ Lab 1 Summary BIO121" and submit it in MS Word format into the "Weekly Summary" drop box.

Weekly summaries are due on Mondays at 7:59 am unless otherwise noted. See the grading guidelines for summaries in this syllabus.

Weekly Summary Grading Guideline	
 All objectives addressed and discussed with a minimum of one sentence each and the two most important concepts are discussed = 14 points Most objectives are addressed and discussed with a minimum of one sentence each and the two most important concepts are discussed = 11 points Major objectives or concepts are missing = 8 points The posting is minimal and does not address concepts or objectives = 5 points 	14 points
 Spelling No spelling errors = 3 points 1 misspelled word = 2 points 2-3 misspelled words = 1 point More than 3 misspelled words = 0 points 	3 points
 No grammar/mechanical errors = 3 points 1 grammar/mechanical error = 2 points 2-3 grammar/mechanical errors = 1 point More than 3 grammar/mechanical errors = 0 points 	3 points
Total points possible:	20 points
Grade Points calculated to:	10 points

Weekly Lab Schedule

Submit online homework (lab questions, lab reports, lab quizzes, lab summaries) into the Midstate eLearning by the end of the week on Monday, Day 7, 7:59 am, unless stated otherwise.

Lab topics and assignments are subject to change with advanced notification to students. A different lab topic will be discussed in the weekly discussion assignment. Post your initial discussion comment in response to the topic(s) by Friday 7: 59 am. Then post a reply to a classmate by Monday, Day 7 by 7: 59 am.

Week 1 (Mon May 20 – TUES May 28) Lab 1 Topic: Endocrine System

May 20: No Monday flex day classes and Monday night classes begin at 7:30 pm); May 27 Memorial Day -the campus is closed.

Objectives: Students will be able to achieve and describe in the lab summary homework:

- Identify major glands and tissues and their body locations;
- Relate each gland to the hormone it produces;
- Explain the function of hormones in homeostasis.

Assignments: Submit the following in the week 1 folder by TUES May 28 before 7: 59 am in BIO 121 Midstate elearning course unless otherwise stated (home page > Midstate elearning).

- 1. Use the lab handout, lab manual and chapter 13 to summarize the learning objectives;
- 2. Download the lab 1 handout from the weekly folder for instructions;
- 3. Submit lab 1 report and the lab 1 questions as one document;
- 4. Submit the lab 1 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by TUES May 28, 7:59 am;
- 6. Study for Lab Quiz 1 (Labs 1 & 2).

Week 2 (TUES May 28 – Mon June 3) Lab 2 Topic: Blood

Objectives: Students will be able to achieve and describe in the lab summary homework:

- Identify the blood elements;
- Explain the antigen-antibody reactions of the ABO and Rh blood groups;
- Describe how blood typing is performed.

Assignments: Submit the following in the week 2 folder by Mon 7: 59 am Midstate eLearning:

- Use the lab handout, lab manual and chapter 14 to summarize the learning objectives;
- 2. Download the lab 2 handout from the weekly folder for instructions;
- 3. Submit lab 2 report and the lab 2 questions as one document;
- 4. Submit the lab 2 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 6. Complete Lab Quiz #1 (Labs 1 & 2).

Week 3 (June 3 - 10) Lab 3 Topic: Heart

Objectives: Students will be able to achieve and describe in the lab summary homework:

- Identify parts of the heart through animal dissection;
- Explain the one-way blood flow through the heart.

Assignments: Submit the following in the week 3 folder by Monday 7: 59 am in BIO 121 Midstate eLearning unless otherwise stated:

- Use the lab handout, lab manual and chapter 15 pages 556-566 to summarize the lab learning objectives;
- 2. Download the lab 3 handout from the weekly folder for instructions;
- 3. Submit lab 3 report and the lab 3 questions as one document;
- 4. Submit the lab 3 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 6. Study for Lab Quiz (Lab 3 & 4).

Week 4 (June 10 - 17) Lab 4 Topic: Blood Vessels (Systemic Circulation)

Objectives: Students will be able to achieve and describe in the lab summary homework:

Identify the major arteries and veins.

Assignments: Submit the following in the week 4 folder by Monday 7: 59 am in BIO 121 Midstate elearning unless otherwise stated:

- 1. Use the lab handout, the lab manual and chapter 15, pages 576 582; 591 -608 to summarize the lab learning objectives;
- 2. Download the lab 4 handout from the weekly folder for instructions;
- 3. Submit lab 4 report and the lab 4 questions as one document;
- 4. Submit the lab 4 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 6. Complete Lab Quiz #2 (Labs 3 & 4).

Week 5 (June 17 - 24) Lab 5 Topic: Cardiovascular Physiology

Last Day to Withdraw with a "W" Grade: Saturday June 29, 2019.

Objectives: Students will be able to achieve and describe in the lab summary homework:

Describe blood pressure, pulse and reading EKG recordings.

Assignments: Submit the following in the week 5 folder by Monday 7: 59 am in BIO 121 Midstate eLearning unless otherwise stated:

- 1. Use the lab 5 handout and chapters 15, pages 566-575, pages 582 -590; page 609 to summarize the lab learning objectives;
- 2. Download the lab 5 handout from the weekly folder for instructions;
- 3. Submit lab 5 report and the lab 5 questions as one document;
- 4. Submit the lab 5 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7:59 am and a reply by Monday 7:59 am;
- 6. Study for Lab Quiz 3 (Labs 5 & 6).

Week 6 (June 24 – July 1) Lab 6 Topic: Lymphatic System Last Day to Drop Courses with a "W" grade is June 29 (Sat).

Objectives: Students will be able to achieve and describe in the lab summary homework:

- Name and state the functions of components of lymphatic system;
- Perform an antigen-antibody test and interpret the results.

Assignments: Submit the following in the week 6 folder by Monday 7: 59 am in BIO 121 Midstate elearning unless otherwise stated:

- 1. Use the lab 6 handout and chapter 16 about the learning objectives;
- 2. Download the lab 6 handout from the weekly folder for instructions;
- 3. Submit lab 6 report and the lab 6 questions as one document;
- 4. Submit the lab 6 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 6. Complete Lab Quiz #3 (Labs 5 & 6).

Week 7 (July 8 - 15) Lab 7 Topic: Respiratory System

Objectives: Students will be able to achieve and describe in the lab summary homework:

- Identify the anatomical parts of the respiratory system;
- Describe the functions of the respiratory system structures.

Assignments: Submit the following in the week 7 folder by Monday 7: 59 am in BIO 121 Midstate elearning unless otherwise stated:

- 1. Use the lab 7 handout and chapter 19 pages 731 -741 to summarize the learning objectives;
- 2. Download the lab 7 handout from the weekly folder for instructions;
- 3. Submit lab 7 report and the lab 7 questions as one document;
- 4. Submit the lab 7 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 6. Study for Lab Quiz 4 (Labs 7 & 8).

Week 8 (July 8 - 15) Lab 8 Topic: Respiratory Physiology

Objectives: Students will be able to achieve and describe in the lab summary homework:

- Measure and estimate lung capacity;
- Relate effects of exercise on respiration.

Assignments: Submit the following in the week 8 folder by Monday 7: 59 am in BIO 121 Midstate elearning unless otherwise stated:

- Make notes of lab 8 handout and chapter 19 pages 741 762 to summarize the lab learning objectives;
- 2. Download the lab 8 handout from the weekly folder for instructions;
- 3. Submit lab 8 report and the lab 8 questions as one document;
- 4. Submit the lab 8 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 6. Complete Lab Quiz #4 (Labs 7 & 8).

Week 9 (July 15 – 22) Lab 9 Topic: Digestive System

Last Day to Drop Courses with a "WP/WF" grade is July 20 (Sat)

Objectives: Students will be able to achieve and describe in the lab summary homework

- Identify organs of the digestive system;
- Test the effectiveness of enzymes in breaking down macromolecules.

Assignments: Submit the following in the week 9 folder by Monday 7: 59 am in Midstate eLearning BIO 121 unless otherwise stated:

- 1. Make notes of the lab 9 and chapter 17 to summarize the lab learning objectives;
- 2. Download the lab 9 handout from the weekly folder for instructions;
- 3. Submit lab 9 report and the lab 1 questions as one document;
- 4. Submit the lab 9 summary in 2 -3 paragraphs including your personal reflections;
- 5. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 6. Study for Lab Quiz 5 (Labs 9 & 10).

Week 10 (July 22 - 29) Lab 10 Topic: Urinary System & Urinalysis

Objectives: Students will be able to achieve and describe in the lab summary homework:

- Identify the urinary system structures;
- Describe the functions of the urinary organs;
- Describe physical and chemical characteristics of urine;
- Analyze and explain urinalysis results.

Assignments: Submit the following in the week 10 folder by Monday 7: 59 am in Midstate eLearning BIO 121 unless otherwise stated:

- 1. Make notes of the lab 10 handout and chapter 20 to summarize the lab learning objectives;
- 2. Download the lab 10 handout from the week 10 folder;
- 3. Submit lab 10 report, the lab 10 handout questions and lab 10 summary;
- 4. Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- 5. Complete Lab Quiz #5 (Labs 9 & 10).

Week 11 (July 29 – Aug 5) Lab 11 Topic: Reproductive Systems

Objectives: Students will be able to achieve and describe in the summary homework:

- Identify female and male reproductive structures;
- Describe the functions of the human reproductive organs.

Assignments: Submit the following in the week 11 folder by Monday 7: 59 am in Midstate eLearning BIO 121 course unless otherwise stated:

- Make notes of the lab 11 and chapter 22 to summarize the learning objectives;
- Download the lab 11 handout from the week 11 folder;
- Submit lab 11 report and the lab 11 questions as one document;
- Submit the lab 11 summary in 2 -3 paragraphs including your personal reflections;
- Post discussion comments by Saturday 7: 59 am and a reply by Monday 7:59 am;
- Study for next week's final exam using the test review handout.

Week 12 (Aug 5 – Sun Aug 11 by 12 noon) Lab 12 Topic: Submit the final comprehensive exam

Objectives: Students will achieve the following at the end of the biology:

- Explain how the endocrine system works to maintains homeostasis;
- Identify important organs of the circulatory, lymphatics, respiratory, digestive, urinary and reproductive systems;
- Identify the tissues and describe those structures using correct terminology;
- Locate major body cavities and identify organs in each cavity;
- Demonstrate knowledge of physiology and the understanding that structure determines function through performance of physiological tests such as blood pressure, urinalysis, respiratory function tests, blood tests and chemical digestion tests.

Assignments:

- 1. Download the final review sheet and review previous lab homework assignments.
- 2. Complete comprehensive final exam by Sunday, Aug 11, before 12 noon (midday) Central Time in the week 12 folder.
- 3. Complete course evaluation by 12 noon Sunday, Aug 11 in Midstate eLearning.