COURSE INFORMATION

COURSE TITLE
BIO 202—Human Anatomy and Physiology II with Lab

COURSE DESCRIPTION
Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive, and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations, and dissection. This is the second semester of a two-semester sequence.

CREDIT HOURS
4

SUGGESTED PREREQUISITE KNOWLEDGE
BIO 201—Human Anatomy and Physiology I with Lab

GUARANTEED TRANSFER (GT) PATHWAYS COURSE STATEMENT:
The Colorado Commission on Higher Education has approved BIO 202 for inclusion in the Guaranteed Transfer (GT) Pathways program in the GT - SC1 Category. For transferring students, successful completion with a minimum C - grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, go to Colorado GT Pathways.

GT-SC1: NATURAL & PHYSICAL SCIENCES CONTENT CRITERIA
Students should be able to:
1. The lecture content of a GT Pathways science course (GT-SC1):
   a. Develop foundational knowledge in specific field(s) of science.
   b. Develop an understanding of the nature and process of science.
   c. Demonstrate the ability to use scientific methodologies.
   d. Examine quantitative approaches to study natural phenomena.
1. The laboratory (either a combined lecture and laboratory, or a separate laboratory tied to a science lecture course) content of a GT Pathways science course (GT-SC1):
   a. Perform hands-on activities with demonstration and simulation components playing a secondary role.
   b. Engage in inquiry-based activities.
   c. Demonstrate the ability to use the scientific method.
   d. Obtain and interpret data, and communicate the results of inquiry.
   e. Demonstrate proper technique and safe practices.

GT-SC1 COMPETENCIES & STUDENT LEARNING OUTCOMES

**Competency: Inquiry & Analysis:**
Students should be able to:

1. **Select or Develop a Design Process**
   a. Select or develop elements of the methodology or theoretical framework to solve problems in a given discipline.

2. **Analyze and Interpret Evidence**
   a. Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus.
   b. Utilize multiple representations to interpret the data.

3. **Draw Conclusions**
   a. State a conclusion based on findings.

**Competency: Quantitative Literacy:**
Students should be able to:

1. Interpret Information
   a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).

2. Represent Information
   Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
The CCCOnline Course Policies page contains information about the student's role in the classroom, grading policies, and rights and responsibilities.
COURSE MATERIALS

All course reading material is available online and linked within the course site. You do not need to purchase any additional textbook materials. However, you will need to purchase a microscope.

MINIMUM COMPUTER REQUIREMENTS

To complete this course, you will need regular access to a computer from which you can access the internet and use email. In order to ensure that your course functions properly, you must run the System Check. This is a critical step, and taking the time to do it now will eliminate a tremendous amount of frustration for you later. To run the System Check, select Tools in the course NavBar, and then select System Check.

REQUIRED eTEXT

MAIN eText


REQUIRED MICROSCOPE

A 400x or 600x power microscope available through your bookstore, local sources, or online. The microscope is not included with your lab kit and must be purchased separately. If you will be continuing on to take BIO204 Microbiology, please consider purchasing a microscope that is 600x - 1000x with the option for an oil immersion lens.

REQUIRED LAB KIT

Your required lab kit will be shipped to you after the drop date for this semester. You do not need to purchase the lab kit separately; it is included in your course fees.

On the first day you access the course, submit your shipping address one of two ways:

1. Via a pop-up window that appears in your course for you to submit your shipping address. This must be done prior to the drop date.
   - Students who live abroad should complete this form by the third day of class.
   - The address you provide must be a physical address and not a P.O. box. Lab kits are sent via UPS, which is unable to deliver to a P.O. box.
2. Via a link on your course homepage near the top right where you can fill in your address. *This link will be available until the drop date for the semester.* You only need to submit your address one time.

- If you do not receive your lab kit tracking information at your student.cccs.edu email account within one week after the drop date, please contact your instructor and the CCCOnline Bookstore at [bookstore@ccconline.org](mailto:bookstore@ccconline.org). (Make sure to check your spam folder before contacting the instructor and bookstore.)
- If you do not receive your lab kit due to an old or inaccurate mailing address, there will be no deadline extensions for lab assignments. CCCOnline is not responsible for delays or lost lab kits due to customs or APO processing.

See the *Lab Kit FAQs* section, located in the *Lab Information* section in the *Syllabus* module, for more information.
COURSE COMPETENCIES AND OUTCOMES

STUDENT COMPETENCIES
The competencies you will demonstrate in this course are as follows:

A. Develop a vocabulary of appropriate terminology to effectively communicate information related to anatomy and physiology.
B. Identify the anatomical structures and explain the physiological functions of body systems.
C. Explain the principle of homeostasis and the use of feedback loops to control physiological systems in the human body.
D. Use anatomical knowledge to describe physiological consequences, and use knowledge of function to describe the features of anatomical structures.
E. Explain the interrelationships within and between anatomical and physiological systems of the human body.
F. Synthesize ideas to make a connection between knowledge of anatomy and physiology in real-world situations, including healthy lifestyle decisions and homeostatic imbalances.
G. Demonstrate laboratory procedures used to examine anatomical structures.
H. Evaluate physiological functions of each organ system including dissection of human or dissection mammalian specimens.
I. Interpret graphs of anatomical and physiological data.

REQUIRED TOPICAL OUTLINE

I. Endocrine System
   a. Overview of the endocrine system
   b. Hypothalamus and pituitary gland hormone interactions
   c. Major endocrine glands and their hormones
   d. Hormone release and regulation
II. Cardiovascular System
   a. Blood
      i. Functions of blood
      ii. Component of blood and their functions
      iii. Hemopoiesis
      iv. Hemostasis
      v. Blood types
b. Heart
   i. Gross anatomy of the heart & pericardium
   ii. Coronary vessels
   iii. Cardiac muscle
   iv. Cardiac intrinsic conduction system
   v. Cardiac cycle
   vi. Cardiac output
   vii. Cardiac regulation and control
   viii. EKG

c. Blood vessels & circulation
   i. Blood vessels structure and function
   ii. Physiology of circulation
   iii. Capillary exchange
   iv. Blood pressure, resistance and blood flow
   v. Blood pressure control and regulation
   vi. Pulmonary circulation
   vii. Systemic circulation
      1. Head and trunk
      2. Upper and lower limbs
      3. Fetal circulation

III. Lymphatic System
   a. Lymph & lymph vessels
   b. Lymph cells, tissues, and organs
      i. Red bone marrow, thymus
      ii. Lymph nodes, spleen, tonsils, MALT

IV. Immune System and the Body's Defense
   a. Innate defenses
      i. Surface barriers
      ii. Innate internal defenses
   b. Adaptive defenses
      i. Antigens
      ii. Lymphocytes and antigen-presenting cells
      iii. Humoral immune response
      iv. Types of immunoglobulins
      v. Cellular immune response

V. Respiratory System
   a. Functional anatomy of the respiratory system
      i. Upper & lower respiratory tract
      ii. Lungs
   b. Respiratory physiology
      i. Mechanisms of pulmonary ventilation
      ii. Neural control and regulation of ventilation
      iii. Respiratory blood chemistry, gas exchange, and gas transport
      iv. Respiratory control and regulation
VI. Digestive System
   a. Functional anatomy of the digestive system
      i. Upper gastrointestinal tract
      ii. Lower gastrointestinal tract
      iii. Accessory organs
   b. Physiology of digestion and absorption
      i. Carbohydrates
      ii. Proteins
      iii. Lipids
      iv. Nucleic acids
      v. Vitamins and minerals
      vi. Digestive regulation and control

VII. Nutrition and Metabolism
   a. Nutrients
   b. Metabolism
   c. Energy balance
      i. Cellular respiration
      ii. Energy & heat
   d. Regulating blood values of nutrients
   e. Function of the liver

VIII. Urinary System
   a. Gross and microscopic anatomy of the urinary system
   b. Functional anatomy of the nephron
   c. Urinary physiology: urine formation
      i. Glomerular filtration
      ii. Tubular reabsorption
      iii. Tubular secretion
   d. Urinary regulation and control
   e. Urine characteristics, transport, storage and micturition

IX. Fluid, electrolyte and acid-base balance
   a. Body fluids
   b. Fluid balance/water balance
   c. Electrolyte balance
   d. Acid-Base balance

X. Reproductive System
   a. Anatomy of the male reproductive system
      i. Duct system and accessory structures and glands
      ii. Sperm and semen
   b. Physiology of the male reproductive system
      i. Male reproduction function
      ii. Hormone regulation and control
      iii. Male sexual response
      iv. Gametogenesis/spermatogenesis
c. Anatomy of the female reproductive system
   i. Oocyte development
   ii. Duct system and accessory structures and glands

d. Physiology of the female reproductive system
   i. Female reproduction function
   ii. Ovarian cycle
   iii. Hormone regulation and control
   iv. Female sexual response
   v. Gametogenesis/oogenesis

The module outcomes that will permit you to demonstrate course competencies are:

**MODULE 1**

**Outcomes**

1. Describe the anatomical location, structure, and function of the endocrine glands. A, B, D, E, F
2. Explain how the endocrine glands work in conjunction with other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
3. Describe the composition and general functions of the blood. A, B, D, E, F
4. Identify the formed elements of the blood and their functions. A, B, D, E, F
5. Describe the anatomical location, structure, and function of the heart. A, B, D, E, F, G, H, I
6. Explain how the blood and heart work with other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
7. Apply knowledge of anatomical and physiological systems to real-life situations. F

**Competencies**

A, B, D, E, F

**MODULE 2**

**Outcomes**

1. Describe the anatomical location, structure, and function of the blood vessels. A, B, D, E, F, G, H
2. Describe the anatomical location, structure, and function of the organs of the lymphatic system. A, B, D, E, F, G, H
3. Explain how the blood vessels and lymphatic organs work together and with other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
4. Describe the structure and function of the immune system. A, B, D, E, F
5. Explain how the immune system maintains homeostasis by protecting the body, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
6. Apply knowledge of anatomical and physiological systems to real-life situations. F

**Competencies**

A, B, D, E, F, G, H

**MODULE 3**

**Outcomes**

**Competencies**

BIO202 Syllabus Page 9
1 Describe the anatomical location and structure of the organs of the respiratory system. A, B, D, E, F, G, H
2 Describe the process of breathing, gas exchange, and transport of gases. A, B, D, E, F, G
3 Explain how the organs of the respiratory system work with other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
4 Describe the anatomical location and structure of the organs of the digestive system. A, B, D, E, F, G
5 Describe the processes of digestion and absorption. A, B, D, E, F
6 Explain how the organs of the digestive system work with other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
7 Apply knowledge of anatomical and physiological systems to real-life situations. F

MODULE 4

Outcomes
1 Describe the metabolic reactions of the body, and provide a brief description of the carbohydrate, lipid, and protein metabolism. A, B, E, F
2 Describe the anatomical location, structure, and functions of the organs of the urinary system. A, B, D, E, F, G, H
3 Explain how the urinary system works with other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
4 Describe the body fluids, fluids compartments, and how the body keeps water balance. A, B, E, F
5 Describe how the body keeps electrolytic and acid-base balances. A, B, E, F
6 Explain how the body works to maintain homeostasis by regulating the concentration of fluids, electrolytes, acids, and bases, and predict possible conditions that would occur if it does not happen. A, B, C, D, E, F
7 Apply knowledge of anatomical and physiological systems to real-life situations. F
MODULE 5

Outcomes
1. Describe the anatomical location, structure, and function of the organs of the male reproductive system.
2. Describe the anatomical location, structure, and function of the organs of the female reproductive system.
3. Explain how the reproductive system works with other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen.
4. Describe the process of fertilization, embryonic development, and fetal development.
5. Describe maternal changes that occur during pregnancy, labor, and birth.
6. Briefly describe the patterns of inheritance.
7. Apply knowledge of anatomical and physiological systems to real-life situations.

Competencies
A, B, D, E, F, G, H
A, B, D, E, F, G, H
A, B, C, D, E, F
A, B, C, E, F
A, B, C, E, F
A, B, E, F
F
GRADING AND EVALUATION

METHODS

The methods for evaluation include a combination of evaluating discussion participation, labs, assignments, and a final presentation. Rubrics will be provided for the evaluation. Information on accessing rubrics is provided on the Course Rubrics page in the Syllabus module of course content.

This class is based on a problem-based design, where you are provided with weekly challenges to push you to think critically. You will discuss and debate your ideas as a way of going deeper into the content. Each module includes interactive labs through which you will learn important vocabulary. Lab kits will provide you with hands-on experiences. At the end of each module you will present what you have learned in your research and reports. You will have a presentation at the end of the course to demonstrate what you have learned.

This page summarizes all of the graded assignments for the course. You should print it out and post it somewhere that is easily accessible.

This course is not self-paced and is not open-exit. All work is to be completed before 11:59 p.m. MST/MDT on the due date listed on the Course Schedule page.

GRADING POLICIES

Mark all module due dates on your calendar for this class. You may submit assignments ahead of schedule. Assignments, discussions, and labs will be given throughout the term with set due dates. See the Course Schedule page for these dates, and make note of them in your calendar. The instructor will communicate any changes to these due dates to the class. If you have an emergency resulting in a missed due date, contact your instructor as soon as possible. No late work is accepted in this course (except in the case of documented emergencies, such as a doctor’s note, military papers, etc.). Due dates will be enforced. Please remember, due to the nature of an online course, it is the student’s responsibility to have access to a functioning computer in order to complete the coursework. Late assignments will not be accepted without prior approval.

Your final grade in this course will be based on the total points that you earn. The grades are final and non-negotiable. They are a measure of your own aptitude and effort. It is expected that you will accept your own performance as an integral part of yourself.
**DEADLINES**

This course is not designed to be self-paced. Within the schedule of the course, though, you have great flexibility with your study time. For the most part, the course is organized according to the week of the semester. Assignments and labs are spread throughout the course, and they have specific deadlines; you must submit each assignment before its deadline expires.

It is strongly recommended that you do not wait until the last minute to complete or submit assignments. There are many things that can and do go wrong: your internet connection might go down, your computer’s hard drive may crash, or you may get ill. You are welcome (and encouraged) to work ahead of schedule to submit work before it is due. Please contact your instructor if you have any questions about what is being asked in any assignment or discussion question. The goal here is learning. Keep that in mind, and enjoy the course.

**COMMUNICATING DIFFICULTIES/ABSENCES**

It is your responsibility to contact the instructor in a timely manner if you become ill or have scheduling or computer problems that would keep you from participating in course activities for an entire week.

**KEEP A COPY OF ALL SUBMISSIONS**

Be sure to save copies of everything you send to the instructor, including both emails and assignments. Murphy’s Law of the Computer seems to be that what can go wrong, will.

**SUMMARY OF GRADING**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>%</th>
</tr>
</thead>
</table>
| Discuss and Debate Discussion (5 @ 20 points each) | 100    | 10%
| Lab Assignments                          |        |    |
| Lab Kits (3 @ 40 points each, 1 at 30 points) |        |    |
| Lab Kits Dissection (2 @ 40 points each)   |        |    |
| Interactive Labs (10 @ 10 points each)    | 330    | 30%
| Research and Report Assignments (5 @ 70 points each) | 350 | 26%
| My System Analysis Final Presentation (1 @ 50 points each) | 50 | 4%
| Module Quizzes (5 @ 40 points each)       | 200    | 30%
| TOTAL                                    | 1030   | 100%

**Grading Scale**

A = 90 to 100%  B = 80 to 89%  C = 70 to 79%  D = 60 to 69%  F = 59% and below
DISCUSSIONS

1. In your Discuss and Debate discussions, you are required to use the sources provided in the Explore section for that module and two additional sources to support your answers. All references must be cited using APA Style. Please refer to the CCCOnline APA Citation Toolkit.

2. In your discussions, it is expected that you post an initial post and at least two follow-up posts. Initial posts all have a minimum word length of 300 words, and both replies (follow-up posts) must be at least 50 words. However, do not aim to do the minimum.

3. Discussions are a very important part of this class experience and cannot be made up after each week’s discussion ends. Discussions are where we can examine real-life applications of course content, and students benefit from other class members' contributions and questions.

4. Response posts should further the discussion by adding related concepts and asking clarifying or follow-up questions of your fellow students.

LAB ASSIGNMENTS

LAB KITS

1. There are Lab Kits you will complete in this course. You will complete a PreLab prior to engaging in the Lab.

2. You are provided a Lab Investigation Manual and Lab Answer Sheets for each lab.

3. Be sure to fill out and submit both your PreLab and your Answer Sheets to the assignment folder.

INTERACTIVE LABS (UP TO 10 POINTS PER LAB)

1. Your goal as a medical professional is to know the vocabulary and to know it quickly.

2. Use the labs to see how quickly and accurately you can label the images.

3. Practice, practice, practice until you feel like you are a medical master!

4. If you cheat and look up answers you are ultimately hurting yourself as a future professional. These are meant to be fun and ultimately help you master important terms.
5. You will be prompted to put your instructor’s email in before starting the lab. You must use your instructor's @cccs.edu email. D2L cannot accept emails from the interactive lab server, so your instructor would not receive confirmation if you use the D2L Internal messaging address. Once you have completed the graded section, your instructor will receive an email with the following information about your lab: the number of terms you have answered correctly; the score out of 10; the total time to complete the graded portion; and the time per term. These measures help prevent against cheating.

6. Your grade will be adjusted by your instructor based on the average time per term. The goal is for you to practice each term until you are comfortable quickly identifying each term (the practice, practice, practice part above). The average time per term for the interactive labs is under 10 seconds per term. If your instructor finds that you are taking 20, 30, or 40 seconds per term - that would indicate that you are looking up each term as you go. Times over 10 seconds per term will result in a point deduction when your instructor enters the interactive lab grade in the gradebook. The grade you receive at completion is a starting point, points may be deducted for long times.

7. You will also need to take screenshots of your results and submit them to the lab assignment folder. Learn how to take a screenshot on your computer:
   - Learn how to take a screenshot on a Mac.
   - Learn how to take a screenshot on a PC.

**ASSESSMENTS**

**RESEARCH AND REPORTS**

Your Research and Report assignment will be assessed each module. The purpose of these reports is to demonstrate your understanding of the module challenge. These are due according to your course schedule.

1. All references in your reports must be cited using APA Style. Please refer to the CCCOnline APA Citation Toolkit.
2. All reports should be at least 500 words. However, this is a minimum. You may find that you need significantly more to comprehensively discuss everything that you learned in each module.
3. These are an application and synthesis of what you have learned in the module. You may need to conduct additional research to answer all components of the report. The report should pull together everything that you learned in your readings, discussions, lab activities, as well as outside research when necessary.

4. You can conduct research through the CCCOnline Library. If you go to the Library’s Research and Database resource page and click Biology, you will see the many resources pertaining to biology to which the Library has access. Also, you can explore the curated resources that have been prepared specifically for the biology classes.

**Quizzes**

Each quiz will include multiple choice and short-answer type questions that will assess the students understanding of the content covered within the assigned readings and learning objectives for each module. Each quiz is worth a maximum of 40 points.

**My System Analysis Final Presentation**

This assessment allows you to choose a system covered in the course that is most interesting to you. You will become an expert and present your system to the parent of a child who is sick. You will choose the format of the presentation (e.g., PowerPoint, Prezi, etc.). In Module 4, you will create a project proposal, and in Module 5, you will work on and finalize your presentation. You can start work on your presentation early if you get approval from your instructor.

1. You have to use at least five references and reference them using APA Style. Please refer to the CCCOnline APA Citation Toolkit.

2. You should provide no fewer than 15 slides in your presentation, not including the reference page(s) in the page count. Again, this is a minimum. Your presentation may require more.

3. You will also need to provide notes or a script or present your project in a video format. At the end of the semester, you will submit your PowerPoint or other presentation along with descriptive content. The descriptive content could be an audio included in the PowerPoint, a video presentation in which you describe your slides, or a supplemental script or notes pages for each slide. The reasoning is that if you were doing a presentation you (hopefully) wouldn't put ALL of your content in bullet points on the slide. If you were doing a presentation, the bullet points would highlight the important parts,
and you would verbally elaborate in your presentation. Do what you're comfortable with. If you prefer to write a script to submit with your PowerPoint then do that. If you want to do a video then do that. If you know how to record narration with PowerPoint (there is a feature in PowerPoint that lets you record a voice-over then do that). The mobile YouTube app makes it really easy for you to record a video, and then you could submit your video link.

4. Refer to the section on the assignment page entitled "Preparing a Research Paper" for specific help on preparing the assignment.

**WRITING ASSISTANCE**

If you need help with writing assignments for this course, here are two great tools that may make the writing process a bit easier:

- CCCOnline Library has created a writing guide that offers help with grammar and sentence structure, and offers tips for the writing process.
COURSE SCHEDULE: 15 WEEK

The schedule is subject to change as needed.

This page summarizes all of the graded assignments, labs, and reading assignments for the course. If you want, you can print it out and post it somewhere handy.

All assignments are described in detail on the module assignment pages. If you have questions, check there and/or send the instructor an email.

This course is not self-paced and is not open-exit. All assignments, labs, discussions, etc., are to be completed by no later than 11:59 p.m. MST/MDT of the due date.

NOTE: Important CCCOnline semester dates (e.g., drop/withdraw/term end) appear on the CCCOnline Calendar.

Review and read materials in Exploration of Topic page and complete your assigned readings

MODULE 1

**Reading/Assignments/Exams**

<table>
<thead>
<tr>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icebreaker in discussion board</td>
</tr>
<tr>
<td>Discuss and Debate in discussion board</td>
</tr>
<tr>
<td>Interactive Lab: Endocrine Glands in the assignment folder</td>
</tr>
<tr>
<td>Interactive Lab: Blood Cells in the assignment folder</td>
</tr>
<tr>
<td>Interactive Lab: The Heart in the assignment folder</td>
</tr>
<tr>
<td>Practice Interactive Lab: The Main Arteries and Veins</td>
</tr>
<tr>
<td>Research and Report in assignment folder</td>
</tr>
</tbody>
</table>

Module 1 Quiz

---

MODULE 2

**Reading/Assignments/Exams**

<table>
<thead>
<tr>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review and read materials in Exploration of Topic page and complete your assigned readings</td>
</tr>
<tr>
<td>Discuss and Debate in discussion board</td>
</tr>
<tr>
<td>Interactive Lab: The Main Arteries and Veins in the assignment folder</td>
</tr>
<tr>
<td>Interactive Lab: The Tonsils, Thymus, Lymph Nodes, and Spleen</td>
</tr>
<tr>
<td>Lab Kit: Mammalian Heart Dissection in the assignment folder</td>
</tr>
<tr>
<td>Research and Report in assignment folder</td>
</tr>
</tbody>
</table>

Module 2 Quiz

Module 3
Reading/Assignments/Exams Due Dates
Review and read materials in Exploration of Topic page and complete your assigned readings
Discuss and Debate in discussion board
Interactive Lab: The Upper and Lower Respiratory Tracts in the assignment folder

Interactive Lab: Alimentary Canal and Accessory Digestive in the assignment folder
Lab Kit: Introduction to Histology: Respiratory System in the assignment folder
Lab Kit: Respiratory Physiology in the assignment folder
Lab Kit: Introduction to Histology: Digestive System in the assignment folder
Research and Report in the assignment folder
Module 3 Quiz

MODULE 4

Reading/Assignments/Exams Due Dates
Review and read materials in Exploration of Topic page and complete your assigned readings
Discuss and Debate in discussion board
Submit proposal for My System Analysis Final Presentation in the assignment folder

Interactive Lab: The Urinary System Organs in the assignment folder
Interactive Lab: The Nephron in the assignment folder
Lab Kit: Mammalian Kidney Dissection in the assignment folder
Research and Report in the assignment folder
Module 4 Quiz

MODULE 5

Reading/Assignments/Exams Due Dates
Review and read materials in Exploration of Topic page and complete your assigned readings
Discuss and Debate in discussion board
Submit My System Analysis Final Presentation in the assignment folder

Interactive Lab: The Male and Female Reproductive Organs in the assignment folder
Lab Kit: Introduction to Histology: Reproductive System in the assignment folder
Research and Report in the assignment folder
Module 5 Quiz