COURSE INFORMATION

COURSE TITLE
BIO201—Human Anatomy and Physiology I with Lab

COURSE DESCRIPTION
Focuses on an integrated study of the human body including the histology, anatomy, and physiology of each system. Examines molecular, cellular, and tissue levels of organization, plus integuments, skeletal, articulations, muscular, and nervous, and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations, and dissection. This is the first semester of a two-semester sequence.

CREDIT HOURS
4

SUGGESTED PREREQUISITE KNOWLEDGE
BIO 111—General Biology

GUARANTEED TRANSFER (GT) PATHWAYS COURSE STATEMENT:
The Colorado Commission on Higher Education has approved BIO 201 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.

• BIO201 GT Pathways Required Syllabus

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).

**CCCOonline Course Policies**

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. \textit{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 \texttt{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 \textit{Lab Kit FAQs} section, located in the \textit{Lab Information} section in the \textit{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 to 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 decision and homeostatic imbalances.
G. Demonstrate laboratory procedures used to examine anatomical structures.
H. Evaluate physiological functions of each organ system including pro-dissection of human or dissection of mammalian specimens.
I. Interpret graphs of anatomical and physiological data.

REQUIRED TOPICAL OUTLINE

I. Human Body Atlas
   a. Human Body Organization
      i. Scope and overview of anatomy & physiology
      ii. Levels of structural organization
      iii. Organ systems
      iv. Maintaining life
      v. Homeostasis
   b. Language of Anatomy / Anatomical Terminology
      i. Anatomical position
      ii. Directional terms
      iii. Major body regions
iv. Body planes and sections  
v. Body cavities and membranes

II. (Review) Chemistry  
a. Basic Chemistry  
   i. Matter, energy, and chemical reactions  
   ii. Atoms, ions, elements, molecules  
b. Water and Mixtures  
c. Energy & Chemical Reactions  
   i. Molecules  
   ii. Chemical bonds and reactions  
   iii. Types of chemical bonds  
   iv. Enzymes  
d. Biochemistry  
   i. Inorganic compounds  
   ii. Organic compounds

III. Cell Structure and Function (Review)  
a. Concepts of cellular structure  
b. Cell surface / plasma membrane structure  
c. Membrane transport – passive and active  
d. Cellular cytoplasm and organelles – structures and functions

IV. Histology - Tissues  
a. Study of Tissues  
   i. Epithelial tissue  
   ii. Connective tissue  
   iii. Muscle tissue  
   iv. Nervous tissue  
b. Cellular junctions  
c. Cellular membranes  
d. Tissue growth, development, and aging/degeneration

V. Integumentary System  
a. Composition and functions of the integument  
b. Skin and subcutaneous tissue  
c. Cutaneous glands  
d. Hair  
e. Nails  
f. Repair of the integumentary system
VI. Skeletal System
   a. Osseous tissue and organs of the skeletal system
      i. Gross anatomy of bones
      ii. Microscopic anatomy of bone tissue
      iii. Microscopic anatomy of cartilages
   b. Bone growth and remodeling
      i. Ossification and bone growth
      ii. Regulation of blood calcium
      iii. Bone fractures and repair
   c. Bones and markings of the
      i. Skull and facial bones
      ii. Vertebral column
      iii. Thoracic cage
      iv. Pectoral girdle and upper limb
      v. Pelvic girdle and lower limb
   d. Joints / articulations
      i. Joints and their classifications
      ii. Fibrous joints
      iii. Cartilaginous joints
      iv. Synovial joints general structure
      v. Synovial joint types and movements

VII. Muscular System
   a. Types and characteristic of muscle tissue
   b. Gross and microscopic anatomy of muscle tissue
   c. Muscle physiology/ muscle-nerve relationship
   d. Classification of skeletal muscle fiber types
   e. Measurement of skeletal muscle tension
   f. Muscle metabolism
   g. Major musculature of the
      i. Head and neck
      ii. Vertebral column and abdominal wall
      iii. Pectoral girdle and upper limbs
      iv. Pelvic girdle and lower limbs

VIII. Nervous System
   a. Nerve tissue
      i. Properties of neurons
ii. Neuroglia
iii. Axon regeneration
iv. Electrophysiology of neurons
v. Characteristics of action potentials
vi. Synapses and neurotransmitters
vii. Neural integration

b. CNS & PNS
   i. Overview of the brain
   ii. Meninges, ventricles, CSF and blood supply
   iii. Brainstem, cerebellum, cerebrum, diencephalon
   iv. Integrative functions of the brain
   v. Cranial nerves
   vi. Anatomy of spinal cord
   vii. Spinal nerves and plexuses
   viii. Somatic reflexes

c. ANS
   i. General properties and divisions of ANS
   ii. Anatomy of the ANS
   iii. Effects on target organs
   iv. Control of ANS

d. Special senses
   i. Properties and types of sensory receptors
   ii. General senses
   iii. Anatomy & physiology of olfaction and gustation
   iv. Anatomy & physiology of hearing and equilibrium
   v. Anatomy & physiology of vision
The module outcomes that will permit you to demonstrate course competencies are:

**MODULE 1**

**Outcomes**

1. Define anatomy and physiology and their relationship, and describe the basic anatomical directional terms and their importance in the clinical practice.  
2. Differentiate the levels of organization, and provide examples of each one.  
3. Describe the organ systems of the body, list their organs, and describe the location of each one.  
4. Define homeostasis, contrast positive, and negative feedback mechanisms, and provide examples.  
5. Describe atoms, elements, compounds, and inorganic and organic molecules, as well as their function in the body.  
6. Apply knowledge of homeostasis, basic anatomical directional terms, organ systems of the body, and chemistry to real-life situations.

**Competencies**

A, B, D, E, G

A, B, D, E

A, B, D, E, F

A, D, E, F, I

A, B, I

C, D, F

**MODULE 2**

**Outcomes**

1. Describe a typical cell, and its different components and their functions.  
2. Explain the process of cell reproduction, growth, and development.  
3. Define histology, and list the four major tissue types.  
4. Classify the different types of epithelial tissues, connective tissues, muscular tissues, and nervous tissues, and their locations and functions in the body, and identify them using a microscope.  
5. Describe the structure and function of mucous, serous, cutaneous, and synovial membranes, and describe their locations in the body.  
6. Describe the stages in tissue repair following an injury.  
7. Apply knowledge of cell and tissues to real-life situations.

**Competencies**

A, D, E

A, D, E

A, B, D, E, G

A, B, D, E, G

A, B, D, E, F

A, C, E, F

F

**MODULE 3**

**Outcomes**

1. Describe the general structure and function of the skin.  
2. Describe the structure and function of the skin appendages.  
3. Describe how the integumentary system responds to maintain homeostasis, and predict the types of problems that would occur if this body system could not maintain homeostasis.  
4. Describe the major components and function of bone tissue and its formation.  
5. Describe the structure and function of bones and joints, and their classifications, components, and location in the body.  
6. Explain how the skeletal system relates to other systems to maintain homeostasis, and predict possible conditions that would occur if it fails.  
7. Apply knowledge of integumentary and skeletal systems to real-life situations.

**Competencies**

A, B, D, E, G

A, B, D, E, G

A, B, C, D, E, F

A, B, C, D, E, G, H

A, B, C, D, E, G, H

A, B, C, D, E, G, H, I

F
**MODULE 4**

**Outcomes**

1. Describe the three types of muscle tissue, and their function and location in the body.
2. Identify the origin, insertion, and action of the major skeletal muscles.
3. Classify the skeletal muscles according to their structure and function.
4. Explain how the muscular system relates to other body systems to maintain homeostasis, and predict possible consequences if it does not occur.
5. Describe the structure and function of the nervous tissue.
6. Describe the structure and function of the organs that belong to the central nervous system.
7. Explain how the central nervous system relates to other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen.
8. Apply knowledge of muscular and central nervous systems to real-life situations.

**Competencies**

| 1 | A, B, D, E, G |
| 2 | A, B, D, E, G |
| 3 | A, B, D, E, G |
| 4 | A, B, C, D, E, F |
| 5 | A, B, C, D, E, G, H |
| 6 | A, B, C, D, E, G, H |
| 7 | A, B, C, D, E, G, H |
| 8 | F |

**MODULE 5**

**Outcomes**

1. Describe the structure and function of the peripheral nerves.
2. Describe the structure and function of the autonomic nervous system.
3. Explain how the peripheral nervous system relates to other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen.
4. Describe the general structure and function of the eyes and ears.
5. Describe the general structure and function of the taste and smell senses.
6. Explain briefly how the senses relate to other systems to maintain homeostasis, and predict possible conditions that would occur if it does not happen.
7. Apply knowledge of anatomical systems to real-life situations.

**Competencies**

| 1 | A, B, D, E, G |
| 2 | A, B, D, E, G |
| 3 | A, B, C, D, E, F |
| 4 | A, B, C, D, E, G, H |
| 5 | A, B, C, D, E |
| 6 | A, B, C, D, E, G, H |
| 7 | 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 generate your ideas in the discussion board before you engage in the readings and exploration materials. Then 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>
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<tbody>
<tr>
<td>Discuss and Debate Discussion (5 @ 20 points each)</td>
<td>100</td>
<td>10%</td>
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<tr>
<td>Lab Assignments</td>
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<td>Lab Kits (4 @ 25 points each)</td>
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<td>Lab Kits Dissection (2 @ 40 points each)</td>
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<td>Interactive Labs (12 @ 10 points each)</td>
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<td>Research and Report Assignments (5 @ 70 points each)</td>
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<tr>
<td>My System Analysis Final Presentation (1 @ 50 points each)</td>
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<tr>
<td>Module Quizzes (5 @ 40 points each)</td>
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<td>TOTAL</td>
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<td>100%</td>
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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.
   - Response posts should further the discussion by adding related concepts and asking clarifying or follow-up questions of your fellow students.

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.

**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.

**MY SYSTEM ANALYSIS FINAL PRESENTATION**

This assessment allows you to choose a system covered in the course (i.e., integumentary, skeletal, muscular, or nervous system) that is most interesting to you. You will become an expert and present your system to an incoming BIO 201 student that does not know anything about the system. 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 the 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 are 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.

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.

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:

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

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.

MODULE 1

<table>
<thead>
<tr>
<th>Reading/Assignments/Exams</th>
<th>Due Dates</th>
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<tbody>
<tr>
<td>Icebreaker in discussion board</td>
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<tr>
<td>Review and read materials in Exploration of Topic page and</td>
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<tr>
<td>complete your assigned readings</td>
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<td>Discuss and Debate in discussion board</td>
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<td>Interactive Lab: Anatomical Position, Body Planes, and</td>
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<td>Interactive Lab: Labeling Organ Systems and Their Organs</td>
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<td>What Is the pH of Common Solutions? in the assignment folder</td>
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<td>Research and Report in the assignment folder</td>
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<tr>
<td>Take the Module 1 Quiz</td>
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</table>
**MODULE 2**  
**Reading/Assignments/Exams**  
Review and read materials in Exploration of Topic page and complete your assigned readings  
Discuss and Debate in discussion board  
Interactive Lab: The Structure of the Cells in the assignment folder  
Interactive Lab: Cell Reproduction and Cancer Cells in the assignment folder  
Interactive Lab: Types of Tissues and Examples in the assignment folder  
Lab Kit: Introduction to Histology in the assignment folder  
Research and Report in the assignment folder  
Take the Module 2 Quiz  

**MODULE 3**  
**Reading/Assignments/Exams**  
Review and read materials in Exploration of Topic page and complete your assigned readings  
Discuss and Debate in discussion board  
Interactive Lab: Skin Layers and the Main Components of the Skin in the assignment folder  
Interactive Lab: Anatomy of a Long Bone: Identifying Bones and Bone Features in the assignment folder  
Lab Kit: Introduction to Histology: The Skin in the assignment folder  
Lab Kit: Introduction to Histology: Cartilage and Bones in the assignment folder  
Research and Report in the assignment folder  
Take the Module 3 Quiz  

**MODULE 4**  
**Reading/Assignments/Exams**  
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 Main Muscles of the Body in the assignment folder  
Interactive Lab: The Brain Structures in the assignment folder  
Lab Kit: Introduction to Histology: The Muscles in the assignment folder  
Lab Kit: Mammalian Brain Dissection in the assignment folder
Research and Report in the assignment folder
Take the Module 4 Quiz

**MODULE 5**

**Reading/Assignments/Exams**
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 Structures of the Eye in the assignment folder

Interactive Lab: The Structures of the Ear in the assignment folder

Lab Kit: Mammalian Eye Dissection in the assignment folder

Research and Report in the assignment folder
Take the Module 5 Quiz

Last modified 12/4/2019 kms