

# **Human Anatomy BIOL-20 Spring 2023**

Sections: 51019, 51020 (Hybrid)

# **Syllabus & Course Information**

# **Instructor Information**

Name: Karen W. Walters, Ph.D.

E-mail: karen.walters@reedleycollege.edu (message through Canvas inbox).

Office: RC Life Sciences 5

Student hours: On Campus or by appointment

o Monday, Thursday 10-12 LS5/Zoom

Wednesday 4:30-5:30 LS5

**Zoom: Dr. Walters Zoom** 

# **Course Meeting Times & Rooms**

**Lecture: 100% Online**, Asynchronous. Lecture material is on Canvas. You are responsible for reading the assigned textbook material, watching online lectures, and completing quizzes and homework assignments. Schedule a minimum of 6 hours/wk.

Laboratory: On Campus 12:30 PM – 3:20 PM Room: Life Science 17 (LS17)

- > Tuesday (51019) OR
- > Thursday (51020) You only attend 1 lab/week-attendance is required\*\*

  \*\* You must attend lab in-person to receive credit for lab activities.

## **Important Dates Spring 2023**

January 9
 January 16 (M)
 January 20
 January 27
 February 20 (M)
 Start of Spring 2023 semester
Holiday-MLK Day Monday-no classes
Last Day to Drop-full refund
Last Day To Drop with "W"
Holiday-President's Day no classes

March 10 Last Day to Drop-grades assigned after this
 April 3-7 Spring Break-Good Friday/Easter no classes

• May 15-19 Final Exams

• May 19th End of Spring 2023 Semester

#### **Exam Dates\*\***

- Exam I Week 4 in Lab: Tuesday (1/31) or Thursday (2/2)
- Exam II Week 8 in Lab: Tuesday (2/28) or Thursday (3/2)
- Exam III Week 12 in Lab: Tuesday (3/28) or Thursday (3/30)
- Exam IV Week 17 in Lab: Tuesday (5/9) or Thursday (5/11)
- Final Exam Week 18: Cumulative-Time/Location TBD

# **Inclusion Statement-Building a Community of Learning**

In this class, we will work together to develop a **learning community** that is inclusive and respectful. Our diversity may be reflected by differences in race, culture, age, religion, sexual orientation, socioeconomic background, and myriad other social identities and life experiences. The goal of inclusiveness, in a diverse community, is to **encourage and appreciate expressions of different ideas, opinions, and beliefs**, so that conversations and interactions that could potentially be divisive turn instead into opportunities for intellectual and personal enrichment.

A dedication to inclusiveness requires respecting what others say, their right to say it, and the thoughtful consideration of others' communication. Both speaking up and listening are valuable tools for furthering thoughtful, enlightening dialogue. Respecting one another's individual differences is critical in transforming a collection of diverse individuals into an inclusive, collaborative and excellent learning community. Our core commitment shapes our core expectation for behavior inside and outside of the classroom.

In this course, all students are expected to treat each other and the instructor with respect and courtesy. Racism, intolerance, and bullying will NOT be tolerated in this course. Any disrespectful, intolerant, racist, or bullying behavior will result in disciplinary action.

**Online communication**: Please be respectful in all online communication including emails, discussion boards. Refer to the <u>course catalog</u> policy on appropriate online communications (netiquette) for all communication in this course.

<sup>\*\*</sup> Exam schedule may be adjusted as needed to accommodate the hybrid environment. All changes will be announced and posted on Canvas in advance.

# **Required Materials and Technology**

#### **Lecture Materials**

- ➤ Textbook: Human Anatomy (Menefee et.al.) is available for free as an online text from LibreTexts. This text is available free online but is also incorporated into our Canvas course. Text and additional lecture materials such as Power points, videos, or reading assignments will be provided in the Canvas modules.
- Recommended Text: Human Anatomy and Physiology (2nd ed.) by Amerman, Pearson. Alternatives to this text include any edition of Tortora and Derrickson's Principles of Anatomy and Physiology, Wiley. This is an excellent textbook for both Anatomy and Physiology if you are in the health-care profession.

#### **Lab Materials**

- ➤ Lab Manual (no cost): The laboratory portion of this class uses an OER Lab Manual. Lab material will be provided in the Canvas modules at no cost to students. You may purchase a pre-printed lab manual from the bookstore (low \$ cost), or print out individual labs as needed.
- ➤ Coloring Book and colored pencils. I do require that you invest in your learning with an anatomy coloring book (~\$24). The Anatomy Coloring Book (4th ed.) by Kapit & Elson, Benjamin Cummings. You may purchase this from Amazon

## **Technology**

To complete this course, you must have use of a **computer with internet access**. Laptops and tablets will work; please do not plan to do this class on your phone. Some of the links and apps we are using do not work well or at all on phones. If you do not have access to a computer, you may check one out from the library.

- Please contact technology services to request a laptop.
- ➤ Additional helpful links and apps: Canvas app for your phone <u>Downloading</u> <u>instructions for the Canvas app</u>
- ➤ Internet browser: Google Chrome or Firefox will run all of the assignments required for the course. Safari does not work well for Canvas quizzes (images do not display), or for many virtual platforms.
- ➤ Word Processing and Slide Presentations. In this course there may be written assignments and slide presentations, I recommend Microsoft Word and Powerpoint. You may also use an alternative version of these platforms if you like (e.g. Google docs and Google slides). If you have a Mac and are using Pages, make sure you convert the file to a pdf before turning it in (see file types below).

- File type restrictions: Throughout the semester you will be uploading many types of files, including documents and images. However there are few file types from Macs or iPhones that will not work on most computers and should not be uploaded as assignment submissions. These include: ".pages", "HEIC" and "HEIF". Pages files are made from the pages applications on Mac computers and iPads; these can easily be converted to a pdf or word document. HEIC and HEIF are image files from iPhones and iPads and are Mac specific. See links below for information on how to convert these file types to more universal formats.
  - How to convert a pages document to a pdf or word document
  - How to convert a HEIC image file to a jpeg
  - How to convert a HEIF image file to a jpeg

# Accessibility

Every effort will be made to ensure that the content of this course is accessible to all students. Video content will be closed-captioned, or transcriptions will be available, documents and online pages will meet accessibility requirements.

# **Course Description and Learning Outcomes**

Biology 20, **Human Anatomy**, is a 4-unit biology course with 3 lecture hours and 3 lab hours per week. This is a course providing a basic understanding and working knowledge of the human body with emphasis on the structure of each major system. The interrelationship between human systems and the relationships between the structure and functions of each system will be studied at several levels: cellular, tissue, organ, system, and organismal. . PREREQUISITES: Biology 1 or 5 or 11A. ADVISORIES: English 1A or 1AH and Mathematics 11 or 45. (A, CSU-GE, UC, I) (C-ID BIOL 110)

## **Student Learning Outcomes (SLO)**

Upon completion of this course, students will be able to:

- 1. **SLO1**: Describe functions of the cells and tissues
- 2. **SLO2**: Describe the functions of the body systems.
- 3. **SLO3**: Identify the major body systems macroscopically.
- 4. **SLO4:** Identify the major body tissue and cell types microscopically.
- 5. **SLO5**: Use a microscope to identify tissues and cells.

### **Course Objectives**

In the process of completing this course, students will

- 1. Identify the basic structure and function of each human system at the macroscopic and microscopic levels.
- 2. Develop important critical thinking skills as they evaluate lecture topics and the results of laboratory demonstrations and experiments.
- 3. Learn how to use scientific methods.
- 4. Develop important manual dexterity skills associated with dissections, free-hand drawings, completion of anatomical color plates, and the operation of microscopes, computers, and other laboratory equipment.

# **Course Outline-Topics**

- 1. Introduction: Anatomical Terminology, Homeostasis, Feedback, and Biochemistry
- 2. Four types of human tissues: Histology–Epithelial, Connective, Muscle, Nervous
- 3. Integumentary System (Skin)
- 4. Muscular System
- 5. Bones: Axial and Appendicular Systems
- 6. Endocrine System
- 7. Nervous System
- 8. Special Senses
- 9. Cardiovascular System
- 10. Respiratory System
- 11. Lymphatic System
- 12. Gastrointestinal Tract
- 13. The Urinary System
- 14. Reproductive Systems: Human male and female

#### Lab Outline

- Lab 1: Anatomical terminology, quadrants, regions
- Lab 2: The cell, mitosis and meiosis
- Lab 3: Histology
- Lab 4: The Integument
- Lab 5: Skeletal System
- Lab 6: Muscular System
- Lab 7: Articulations
- Lab 8: Endocrine System
- Lab 9: Nervous System
- Lab 10: Special Senses
- Lab 11: Cardiovascular System

Lab 12 Respiratory and Lymphatic Systems

Lab 13: Digestive System

Lab 14: Urinary System

Lab 15: Reproductive System

# **Assignments and Grading**

#### **Lecture Evaluations**

- ➤ Chapter quizzes. Lecture material will be assessed by weekly Canvas quizzes to measure understanding, mastery of the material and in preparation for the unit exam
- Canvas homework assignments are planned to re-enforce the lecture material. Assignments vary, but may include watching a movie, reading an article, listening to a podcast, etc.

#### **Lecture Exams**

- There will be **4 lecture exams and a cumulative final exam** (see the Tentative Schedule and Canvas for exam dates). Exams may only be made up due to extreme circumstances, at the discretion of the instructor, if arranged with the instructor **before** the scheduled exam period (at least 48 hrs prior).
- ➤ Each exam will include new material covered in the corresponding unit. Exams will consist of multiple-choice, matching, fill in the blank, and short-answer/essay questions. Forming study groups and attending SI sessions is highly recommended.
- ➤ All exams will be given during scheduled in-person lab sessions. Exams will combine lecture and laboratory material.
- > A scantron will be required 882E.

#### Lab Exams

- Lab exams must be taken on the day that they are scheduled. There are no make-ups, no exceptions. There will be **4 lab exams** (see the Tentative Schedule and Canvas for exam dates). These exams will be in the form of a practical, where stations are set up with models, microscopes, and/or images for identification. Students will rotate around the room until all students have been through all stations. Questions are multiple choice, fill-in, and short answer.
- ➤ Lab quizzes will be scheduled to reinforce learning and in preparation for the lab practicals. (see the Tentative Schedule and Canvas for quiz dates)

### Lab Reports & Quizzes

- ➤ Each week you will complete 1-2 labs during the scheduled time (see the course schedule for details). There are 15 labs planned.
- Completed labs will be turned in digitally on Canvas as a PDF file.
- > For each lab, take the associated online lab quiz to assess mastery.

### **Anatomy Coloring**

- > Weekly coloring will be assigned in the Anatomy Coloring Book (Kapit 4th Ed)
- > Completed coloring will be turned in digitally on Canvas as a PDF file.

# **Grading Policy**

Activity	Points	% of Grade	Breakdown
Exams (Lec/Lab)	530	53%	4 exams @125 Bone quiz (15) Muscle quiz (15)
Final Exam	100	10%	1 cumulative final @100 points
Lab Reports-Quizzes- Anatomy coloring pages	275	27.5%	15 @ 15 points Endocrine poster presentation (25) Muscle Pairs presentation (25)
Lecture Assignments	95	9.5%	Chapter Reading & Syllabus Quiz (50) Homework (40)
Totals	1000	100%	

Grades will be posted on Canvas and will be updated regularly throughout the semester.

Letter grades will be based on percentages of total points earned:

$$90 - 100\% = A$$

$$80 - 89\% = B$$

$$70 - 79\% = C$$

$$60 - 69\% = D$$

$$59 - 0\% = F$$

#### **Course Policies**

#### Communication

The best way to communicate with me is by **email**. I check email often and will respond within 24 hours during the week. If you do not receive a response within a day, assume I did not receive your communication- please resend the email. You may email through Canvas or directly. Please remember to include your name, ID, and the course. Canvas will do this automatically for you.

**E-mail:** karen.walters@reedlevcollege.edu (message through Canvas inbox).

Office: RC Life Sciences 5

**Student hours:** On Campus or by appointment. I will be available on Zoom during M/TH office hours.

Monday, Thursday 10-12 LS5/Zoom

Wednesday 4:30-5:30 LS5

Zoom: Dr. Walters Zoom

**Canvas** - I will send **weekly announcements** and provide **feedback** on your submitted assignments. Canvas is our primary contact point for the course. You should be checking Canvas daily to keep current. I recommend that you set the notifications to alert you when announcements are posted. <u>How to reset notifications</u>

### **Attendance and Drop Policy**

As with any class, regular attendance is a key to success! It is critical that you establish your intentions to remain enrolled in the class. During the first week, Complete the Getting Started module, review the lecture material and **attend lab**. Take advantage of opportunities to connect with the instructor and your peers.

- ➤ Attendance is required for all laboratories unless class is canceled or not meeting due to holiday schedules. Attendance will be taken during every class session.
- ➤ Attendance is **not graded** but your participation in class and lab will enhance your success and enjoyment of the course.
- > Students will be dropped from this course if they do not attend the first in-person lab without prior notification to the instructor.

# **Review and Study Expectations**

> Study Expectations. Consider the following statement as a general guideline for participation for this class: "It is usually expected that students will spend approximately 2-3 hours of study time outside of class for every one hour in class. Since this is a 4-unit class (6 hrs/week), you should expect to study an average of at least 12-18 hours outside of class each week. Some students may need more outside study time and some less. "

- ➤ **Review** and practice opportunities will be provided both during class time and in optional in-person or virtual (Zoom) sessions. Watch Canvas announcements for details.
- > For **extra help**, please feel free to reach out. There are a number of resources to help you!
  - Student Hours with your instructor(s)
  - Tutorial Center: Contact the Reedley tutorial center here
  - Study groups-form one!

### **Late Work Policy**

**Exams** will be given on the days/times posted. These exams will cover multiple chapters and overlap material presented in labs. There are **no make-up exams**, plan accordingly. I reserve the right to make exceptions under extenuating circumstances. You must notify me 48 hours **BEFORE** the exam.

Assignments are due on their due date. Assignments submitted late will not receive credit (see note below). Your success in Anatomy will be directly related to the time and effort you put in to complete the labs and course work. Assignments will not be accepted for credit after the exam covering the material. For example, no assignments from weeks 1-4 will be accepted after Exam I.

Note: Life happens. I will allow 3 "late" assignments for the semester. You do not need to tell me why the assignment is late but, above rules still apply and if you use your 3 "get out of late jail" cards, all further late assignments are a "0".

## **Assignment & Exam Feedback**

I will make every effort to grade assignments promptly and give you meaningful feedback. A reasonable expectation is that assignments will be graded within 1 week of submission. Grades will be updated in Canvas as assignments are completed. Note-Canvas grading scale may not be accurate. Your course grade is determined as a % of the **total points** for the semester. If you have any questions or concerns about grading, please reach out to your instructor.

# **Technology Support Policy**

For basic technology concerns related to the course, I am happy to help. For questions related to navigating Canvas, access to assignments, broken links and such, please send me an **email**. If you have any issues with Canvas that are not directly related to the materials in our course, or more technically challenging, then please contact Technology Services and Support.

### **American Disability Act**

"If you have verified need for an academic accommodation or materials in alternate media (ie: Braille, large print, electronic text, etc.) per the American With Disabilities Act or Section 504 of the Rehabilitation act please contact your instructor as soon as possible"

### **Academic Dishonesty Policy**

"Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, <u>each student is expected to exert an entirely honest effort in all academic endeavors.</u> Academic dishonesty in any form is a very serious offense and will incur serious consequences."

**Cheating** is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

**Plagiarism** is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify contributors to work done in collaboration, submitting duplicated work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents. For more information, contact the Vice President of Instruction and Student Services' Office."

# **Biol 20: Human Anatomy Spring 23 Schedule-Hybrid\***

DATES	Lecture- On Canvas	Lab-Attend in person	
Unit 1: Week 1 1/9/23	Course Intro Introduction to Anatomy/The Cell Read: CH 1, 2 (Anatomy OERI text) HW 1: Cell Labeling (5)	Lab 1 – Introduction to Anatomy Safety, Microscope, Terminology Coloring Pages Lab 1 Quiz	
Holiday	MLK Day - No Classes Monday		
Week 2 1/16/23	Histology-Tissues Read: CH 3 HW 2: Virtual Microscope (10)	Lab 2 – Histology Tissues Coloring Pages	
Week 3 1-23-23	Integumentary System (Skin) Read: CH 4 HW 3: Skin Color (5)	Lab 3 – Integumentary System Skin model Coloring Pages	
Week 4 1-30-23	Unit 1: Lecture/Lab Exam I Given during Lab Chapters 1-4, Labs 1-3		
<b>Unit 2:</b> Week 5 2/6/23	The Skeletal System CH 5, 6, 7 Read: CH 5, 6, 7 Articulations Read: CH 8	Lab 4 – The Skeletal System All the bones Lab 5 - Articulations Coloring Pages-review! Study Bones	
Week 6 2/13/23	The Muscular System I Read: CH 9	Bone Quiz Lab 6 – Muscular System I Cellular & Tissue	
Holiday	President's Day-No Classes Monday		
Week 7 2/20/23	The Muscular System II CH 10 Read: CH 10	Muscle Quiz Lab 6 (cont)— Muscular System II Muscular System-major muscles Muscle presentations-muscles on skeleton	
Week 8 2/27/23	Unit 2: Lecture/Lab Exam II Given during Lab Chapters 5-10, Labs 4-6		

Unit 3: Week 9 3/6/23	Endocrine System Read: CH 15	Lab 7 – Endocrine System  Poster Session-Endocrine			
Week 10 3/13/23	The Nervous System CH 11, 12, 14 Read: CH 12, 14 HW 4 Nervous Labeling (Google)	Lab 8 – The Nervous System Lab 8a – Sheep Brain Dissection Upload picture of dissection			
Week 11 3/20/23	Special Senses CH 13 Read: CH 13	Lab 9 – The Senses Lab 9a – Eyeball Dissection Upload picture of dissection			
Week 12 3/27/23	Unit 3: Lecture/Lab Exam III Given during Lab Chapters 11-15, Labs 7-9				
Spring Break April 3-7 (Good Friday- NO Classes)					
Unit 4: Week 13 4/10/23	The Cardiovascular System CH 16 Blood CH 17 Heart CH 18 Blood Vessels/circulation	Lab 10 – The Cardiovascular System Heart, vessels, blood cells/typing Upload blood typing results			
Week 14 4/17/23	The Lymphatic System CH 19 The Respiratory System CH 20 HW 5 Immune System	Lab 11 – The Lymphatic System Lab 12 – The Respiratory System			
Week 15 4/24/23	The Digestive System CH 21 CS Celiac Disease	Lab 13 – The Digestive System			
Week 16 5/1/23	The Urinary System CH 22 The Reproductive System CH23	Lab 14 – Urinary System Lab 15 – Reproductive System			
Week 17 5/8/23	Unit 4: Lecture/Lab Exam IV- Given during Lab				
Week 18 5/15/23	Final Exam - Cumulative				

<sup>\*</sup>This schedule is tentative and subject to change. Check Canvas for most current information.