Biol 5	
Semester: Spring 2022	**Reedley College**
Instructor (lec): Joseph Lin **Instructor (lab): Tim Meyers and Karen Marks**	**Class No.** 50771 / 53367
Lecture/Lab Email: Lecture Instructor Email: Joseph.lin@reedleycollege.edu Victor.chavez@reedleycollege.edu Lab Instructor Email: 50771: Timothy.myers@cloviscollege.edu 53367: Karen.marks@reedleycollege.edu	**Course (Lecture and Lab):** **Hybrid** **Lecture:** Asynchronous **Lab:** In person 50771: Tues LFS 17 3:30-6:20 PM 53367: Tues LFS 17 12:30-3:20 PM
Telephone: 559-638-0300 **Ext.** 3407 (RC Office) 559-795-9175 (Direct cellphone)	**Website:** To access the course https://scccd.instructure.com using your SCCCD username and password.
Office Hours on Discord (See Apps page 2) M-Th @ 1:00-2:00 https://discord.gg/B7UbGUW	

Course Format

This course is **Hybrid**: **lecture** portion of the course will be **asynchronous** with no mandatory Zoom course meetings and **lab** portion of the course will be **synchronous in-person** at Reedley College unless notified to shift virtually due to emergency conditions.

Asynchronous Learning:
Asynchronous learning is a student-centered teaching method widely used in online learning. Its basic premise is that learning can occur in different times and spaces particular to each learner, as opposed to synchronous learning at a same time and place with groups of learners and their instructor, or one learner and their instructor. In asynchronous learning, instructors usually set up a learning path, which students engage with at their own pace.

Synchronous Learning:
Synchronous learning refers to all types of learning in which the learner(s) and instructor(s) are in the same place, at the same time, for learning to take place. This includes in-person classes, live online meetings when the whole class or smaller groups get together. In synchronous learning, students usually go through the learning path together, accompanied by their instructor who can provide support while students are completing tasks and activities
The following sections regarding COVID are subject to change given the changing circumstance on campus and in the community. Please check the COVID website for the most up to date information at:
State Center Community College District: COVID Vaccination Submission (scccd.edu)

State Center Community College District: Novel Coronavirus 2019 (COVID-19) (scccd.edu)

SCCCD will require a **COVID vaccinatio**n for the spring 2022 semester with exemptions available. Student and Staff **COVID testing** is available at RC Staff dining M-Th 9:00-6:00 pm other locations: State Center Community College District: Vaccine Requirement Frequently Asked Questions (scccd.edu)

Safety Measures: Face coverings are required to be worn indoors on-campus and during in-person classes (vaccinated or not), and/or in accordance with learning site requirements if participating in off-campus experiential learning, to reduce the risk of community spread of COVID-19. The Student Health and Counseling Center has complimentary masks available for students who need them. The mask requirement may be modified if/when transmission rates in Fresno Country drop below the threshold identified by the CDC.

Health Screening: Students who come to campus and/or are participating in off-campus in-person experiential learning will be required to complete a health screening before coming to campus or learning site. You are not allowed to come to campus if any of the following is true:
If you are experiencing COVID-19 symptoms (vaccinated or not).
If you have tested positive within the past 10 days.
If you have a suspected or confirmed case of COVID-19, please complete the campus "Student Health Screen Check In" at Information About Coronavirus (COVID-19) | Reedley College

Introduction

Welcome to the **Human Biology BIOL 5** course. In this course, you will examine basic principles and terminology in **human biology**, including the chemical basis of life, cell structure and division, a broad survey of the major systems of the human body with a special emphasis on human health disease, human evolution and ecology. This course should provide students who do plan to continue in the sciences or pre-health programs with a working knowledge of life science that will be useful in making informed decisions on health and the environment.

Course description

Primarily for students majoring in health-related professions, this course is a prerequisite for the Nursing and Physical Therapy programs, satisfies a major requirement for those students majoring in Kinesiology or Public Health, and satisfies other major requirements for Biology majors. Prerequisites: BIOL 20, grade of C or better OR BIOL 1A AND CHEM 1A/1AL (or 3A*), grade of C or better.

Textbooks

There is no traditional textbook; you will need to purchase the access code for McGraw-Hill Connect to include the eBook. If you wish to have a traditional textbook you may contact McGraw-Hill and you will receive a discount on a hard copy of the text, but in order to complete this course you must have access to the eBook.

You are required to finish assignments and assessments online. In addition, there will be important information online. It is **YOUR RESPONSIBILITY** to come to both lecture and lab prepared with the content assigned.

Purchase URL for Connect online

Apps

McGraw-Hill Connect: Your access code will allow you to access the textbook and assignments. Although I have the assurance from the publisher that the content in your online assignments works for all electronics, this may not be the case. **It is your responsibility to find out if the content works with your electronic device.**

Canvas: Canvas is fully functional on many types of smartphones and tablets. Compatible devices include platforms such as iPhone/iPad/iPod Touch, and Android. **However, it is recommended that you do not solely rely on one of these devices to complete your online course work. Access to a computer is still needed for many online activities.** Visit the Mobile section of the Canvas Guides website for more information. Once you have downloaded the Canvas Mobile App and are prompted to Find My School, search for: csuconnect.instructure.com

Communication Expectations

Identify yourself by your real name. Be mindful of your language, and avoid including personal information, such as phone numbers or addresses, in discussion forums. All online communications should be transmitted with the intent to inform, inspire, etc. and not to offend or breach personal privacy.

Use humor, joking, or sarcasm with caution. We often rely on non-verbal cues such as facial expressions to communicate joking or sarcasm, but these cues are not always clear in an online environment. These cues can be simulated with emoticons to reduce misunderstandings.

Be Professional, Clear and Respectful. Clear and effective writing translates to clear and effective communication. Writing the way you would speak is a good rule of thumb, use a positive tone and adhere to the same rules you would follow in face- to-face communications.

Remember This Course is Online. Your instructor and fellow students may be located around the world or have very different schedules than you do. You may not always receive an immediate response.

Course Structure

This course is **HYBRID**, which means it is self-paced with readings and videos to be completed at your own time and one lab meeting each week. Lecture assignments are all self-paced while lab assignments are due at the end of each lab session. Optional Zooms sessions will be hosted every week and should contentbe discussed it will be recorded for you to view.

Optional Zoom Meetings

The course facilitators will schedule several one-two hours Zoom session per week which will be recorded for you to review. During these sessions, course participants will be introduced to course content to improve understanding of the lecture and lab.

If you are a new Zoom user, visit the Getting Started Resources on the Zoom website:
https://support.zoom.us/hc/en-us/categories/200101697

Learning Environment

This fully online course is designed using asynchronous activities, assignments, discussions, and assessments. The course will make use of many common LMS (learning management system) tools, e.g., Canvas. Please be sure to read all the lessons and documents in the course so that you have the necessary information to complete the required activities. If your campus uses a different LMS than Canvas, we recommend you watch the *"Navigating this Course"* Video before getting started.

Learner Expectation

- This is a fast-paced course that requires regular engagement throughout all two weeks.
- Ensure you have approximately 10 hours per week to spend on this course

- Review the assignments on the Course Schedule and print it out for easy reference as you complete each task.
- You are expected to plan your study time around the course schedule and recommended completion dates.
- While the due dates for the course are just suggestions, it is expected that **all assignments will be submitted based on due dates located on McGraw-Hill Connect website.**
- Check your email account regularly for updated information. Use e-mail for private messages to the instructor and other students. The discussion forum is for public messages.
- If you have questions or confusion about an assignment, act promptly! Check the Question Cafe to see if your concern has been addressed already and post your question there if you don't see an answer.
- We are human and sometimes links or other pages need updating or become inactive.
- Read directions carefully.

Course Objectives

1. Read, analyze, evaluate, and discuss scientific method, the cell, and human levels of organization
2. Learn the periodic table of the elements, the chemistry of the carbon atom, and the chemical structure of humans
3. Analyze and interpret data on the homeostatic mechanisms within the human body
4. Learn the cell's structure, function, and the cell cycle in relation to the multicellular human body
5. Observe and document the structure and function of the human body by examining human body systems including circulatory, digestive, respiratory, urinary, skeletal, muscular, nervous, sensory, endocrine, and reproduction
6. Review classical and molecular genetics and learn the processes of replication, transcription, and translation
7. Perform experiments, observe, and record data
8. Study evolution
9. Discuss social issues between humans and science
10. Develop a vocabulary to effectively communicate information related to anatomy and physiology.
11. Summarize the levels of structural organization important to the human anatomy

Course Student Learning Objectives

1. Demonstrate knowledge regarding the process of science and society, microscopy, and the cell
2. Identify human body levels of organization and homeostatic mechanisms
3. Demonstrate knowledge of the chemical basis of life
4. Evaluate scientific literature and current biological achievements
5. Apply the principles of genetics to humans and understand the outcome of normal and abnormal DNA
6. Describe the basic cellular, molecular and gross anatomy of tissues, organs and organ systems and explain the basic function of those tissues and organs that relate to the integument, circulation, digestive, respiratory, urinary, skeletal, muscular, nervous, endocrine, reproduction, genetics, and evolution
7. Identify and recall fundamental structures from anatomical models and slides using correct nomenclature and language

Course requirements/assignments

Total points:

Assignment Description	Points
LearnSmart (20@5pt)	100 points
IRAT Quizzes (20@10pt)	200 points
Final Exam via Connect	150 points
Lecture Exams (4@75pt) via Connect	300 points
Lab Exams (1@25pt, 2@50pt) in Lab	125 points
Lab Reports (14@15pt)	210 points
Case Study Project (Infographic Presentation)	100 points
Discussions (11@ 8pt)	88 points
Connect Practice Lockdown Exam	2 points
Total	**1275 points**

To calculate your grade, total all points earned and divide that number by the total points available (1,313). **Course grades are non-negotiable**; **Instructor reserves the right to curve individual tests and/or assignments.** **FINAL GRADES WILL NOT BE CURVED… ALSO, I DO NOT round up your grades to the next lett**

Instruction for significant assignments

Lecture Exams:
Four lecture exams and one comprehensive final will cover the topics listed in the schedule below. The lecture exams will be on Connect with a required Lockdown browser and integrity signature required. A webcam is **not** required for the exam. Each lecture exam is open for 48 hours and you must complete it during that time frame. The comprehensive portion of the final will only be 20% of that exam; the other 80% will cover the final topics in the course.

Lab Exams:
Lab exams must be taken on the day that they are scheduled. There will be 3 lab exams (see the Tentative Schedule for exam dates). These exams will be given in the lab room (more info from your lab instructor) and utilize images of models, slides, diagrams, and experimental set up. Questions will be a variety of fill-in, multiple choice, and matching questions.

LearnSmart & IRAT:
What you learn in Physiology will be assessed prior to the lecture. Scores for these How much content and critical thinking you learn from lecture will be formatively assessed using McGraw-Hill Connect, accessed through Canvas. MH Connect scores will be based on participation and completion at a 10-point total and posted in the Canvas gradebook. IRAT quizzes will occur on dates specified on the course schedule in class. IRAT quizzes are given through Connect website and will only be open for a set period. If you are late your quiz will still be collected automatically when the time is up. Material may include and combination of multiple-choice, true-false, matching, fill in the blank, and short answer questions. **IRAT and Learn Smart assignments will be due the Sunday 11:59PM of each week.**

Lab Reports
The lab is in-person with weekly lab worksheets that you will need to complete for your lab. The submission of these labs will depend on your lab instructor. These worksheets are called Lab Reports which come from your lab manual that you will submit as a PDF into Canvas after completion of the lab. The Lab Reports can be typed up or handwritten however if you choose to hand write your Lab Reports DO NOT submit photos of your report. Please download a phone app that you can utilize the camera to create a high-quality scan as a PDF before you upload. Examples of apps: Adobe Scan, Microsoft Office Lens etc.
Lab Reports will be due based on your lab section.

Case Study Presentation
Each student will be responsible for working with a group of students (2-3) in this course to complete a case study presentation or project. Each group of students will be assigned a patient with a disease. At the conclusion of the semester, each group will submit a written outline or visual infographic describe in their patient's disease. And the appropriate course of diagnosis, treatment, and prognosis. Detailed instruction will be on Canvas. This will take place during the lab.

Grading

To calculate your grade, total all points earned and divide that number by the total points available. Course grades are non-negotiable; because extra credit points, exam curves, and low score replacement are offered the grading scale will not be adjusted; I DO NOT ROUND UP your grades to the next letter grade. The final course grade is based on:

Percent Range	***Grade***
90-100	A
80-89.99	B
70-79.99	C
60-69.99	D
Less than 60	F

I **WILL NOT** give an individual student separate extra credit at the end of the course to increase their percentage grade. I do not mind correcting honest mistakes so do not hesitate to contact me regarding them, but do NOT ask for special treatment. Do not contact me to request that I "give" you a higher grade**: you earn the grade you receive in this course**.

How to be Successful in this Course:

- If you should have trouble understanding the material presented in the course, it is your responsibility to see either your lab TA or me at the earliest possible time. Do not wait until the final weeks of the course.
- This course requires that you become familiar with and understand a great deal of information about the human body. This includes the LearnSmart reading assignments, which are purposely assigned ahead of lecture.
- Listen in lecture and take good notes using my outlines/pdfs from. Organize your notes and redo them if necessary, after lecture. Review your notes frequently, not just before a test.
- Do your reading assignments prior to the lecture on that topic. Read your labs prior to the lab period and partially complete the lab report to verify your answers during the lab.
- Keep a vocabulary list of all terms mentioned in lecture, in bold print in the text, or listed at the end of each chapter. Know the meaning of each of these terms and the correct spelling. Use APR if you have trouble with pronunciation.
- Spend some time studying each day. You are learning a new language; immerse yourself in it! Review notes for 15-30 minutes at one time. The best way to absorb book chapters is to read for one hour at a time. Don't try to complete your study hours all in one sitting or on the same day, as your efficiency will drop dramatically. Review an additional 3-5 hours a day prior to examinations.
- Form study groups to work together. Make your own review sheet or, if you work in a study group, have each person make a review sheet for a chapter and teach each other.
- Remember that homework is due prior to the end of the unit. Don't wait for the last minute to turn it in. This also will help me to see whether the whole class is having trouble understanding a concept before I test you on it. Obviously, it is much better for your grade in the class if I know you are having trouble.
- Use all materials available (text, lab notebook, Connect, interactive PowerPoints, model keys, internet sites, etc.); if one study method does not work try another! Use as many ways to access your memory as possible (auditory, visual, kinetic, etc.)

College Policies

The college has several policies that you will be expected to adhere to in my course. The Policy on Students with Disabilities, the University Honor Code, the Policy on Cheating and Plagiarism, a statement on copyright, and the university computer requirement, portions of which are below, can all be found in the University Catalog (Policies and Regulations) and Class Schedule.

Attendance and Drop/Add Policy

- Your success in this course requires that you be ***on time and here*** for each lecture and lab. Excuses for absences will be honored at my discretion. Most announcements will be placed on Canvas but find a "buddy" in class to inform you of any announcements that might be made during your absence. I will drop students (both enrolled and waitlisted) based on the following policy:
- Student does not attend the first lecture.
- Student does not attend the first lab.
- Student misses a cumulative 7 hours (lecture or lab) in the first two weeks.
- Student misses 8 hours (lecture or lab) up to drop date without providing an excuse.

Cheating and Plagiarism:

I DO NOT TOLERATE CHEATING. PERIOD. Most of you are entering into the health care field and could harm or seriously injure other human beings if you do not know the basic information in this course. The University policy reads, "Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Typically, such acts occur in relation to examinations. However, it is the intent of this definition that the term 'cheating' not be limited to examination situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one's own.

Diversity Statement:

"Respect for Diversity: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can arrange something that works

Subject to Change Statement:

This syllabus and schedule are subject to change in the event of extenuating circumstances. If you are absent from class, it is **your responsibility** to check on announcements made while you were absent.

Tentative Connect Schedules

Week	Dates	Lecture (Book Chapter)	Lab (Manual Topic)
1	1/10-1/14	Introduction, and Exploring Life and Science (1) **IRAT & LearnSmart Ch.1 (1/16)**	Lab 1: Introduction to Microscopy
2	1/17-1/21	Chemistry of Life (2) **IRAT & LearnSmart Ch.2 (1/23)**	Lab 2: Biological Macromolecules
3	1/24-1/28	Cell Structure and Function (3) **IRAT & LearnSmart Ch.3 (1/30)** **1/18: Martin Luther King Jr Day**	Lab 3: Cell Structure and Function
4	1/31-2/4	DNA Biology and Technology (22) **IRAT & LearnSmart Ch.22 (2/6)** Chromosome Inheritance (19) **IRAT & LearnSmart Ch.19 (2/6)** **Exam 1 (2/4-2/5)**	Lab 4: DNA: Transcription and Translation
5	2/7-2/11	Organization and Regulation of Body Systems (4) **IRAT & LearnSmart Ch. 4 (2/13)**	Lab 5: Mitosis and Meiosis Lab Practical 1
6	2/14-2/18	Cardiovascular: Heart and Blood Vessel (5) **IRAT & LearnSmart Ch.5 (2/20)** Lymphatic System and Immunity (7) **IRAT & LearnSmart Ch.7 (2/20)** **2/12: Lincoln Day**	Lab 6: Genetics and Inheritance
7	2/21-2/25	Digestive System (9) **IRAT & LearnSmart Ch.9 (2/27)** **2/15: Washington Day**	Lab 7: Histology
8	2/28-3/4	Respiratory System (10) **IRAT & LearnSmart Ch.10 (3/6)** **Exam 2 (3/4-3/5)**	Lab 8: Cardiovascular System
9	3/7-3/11	Urinary System (11) **IRAT & LearnSmart Ch.11 (3/13)**	Lab 9: Homeostasis: Digestion, Respiration and Urinary Systems
10	3/14-3/18	Skeletal System (12) **IRAT & LearnSmart Ch.12 (3/20)**	Lab Practical 2
11	3/21-3/25	Muscular System (13) **IRAT & LearnSmart Ch.13 (3/27)**	Lab 10: Musculoskeletal System
12	3/28-4/1	Nervous System (14) **IRAT & LearnSmart Ch.14 (4/3)** Senses (15) **IRAT & LearnSmart Ch.15 (4/3)** **Exam 3 (4/1-4/2)**	Lab 11: Nervous System and Senses

13	4/4-4/8	Endocrine System (16) **IRAT & LearnSmart Ch.16 (4/10)**	Lab 12: Virtual Fetal Pig Dissection
14	4/18-4/22	Reproductive System (17) **IRAT & LearnSmart Ch.17 (4/24)**	Lab 13: Reproduction and Development
15	4/25-4/29	Development and Aging (18) **IRAT & LearnSmart Ch.18 (5/1)** **Exam 4 (4/29-4/30)**	Lab Practical 3
16	5/2-5/6	Biology of Infectious Disease(8) **IRAT & LearnSmart Ch.8 (5/8)**	Lab 14: Human Evolution
17	5/9-5/13	Ecology and Nature of Ecosystems (24) **IRAT & LearnSmart Ch.24 (5/15)**	Case Study Presentations
Finals	5/16-5/20	**FINAL EXAM (5/17-5/19)**	Finals No Labs