Course Syllabus

Lecture: Section 1 and 231, MWF, 2:00 pm -2:50 pm, 
Section 2 and 232, MWF, 3:00 pm - 3:50 pm,
Lecture files will be posted to the Canvas class page no later than 1 day prior to regular class time.

Honors (Life 202B) Sections R90 & R91: Chemistry B 301, R 11:00-11:50 AM R*
Recitation *This recitation is required to receive honors credit*

Instructors: Mr. Drew Tonsager Andrew.Tonsager@colostate.edu
Dr. Thomas Kuhn Tom.Kuhn@colostate.edu
By appointment (phone, email, or meet after class to schedule)
Responses to emails will be provided within 1 business day, 8 a.m.–5 pm

Teaching Assistants Kelsey Martin Kelsey.E.Martin@colostate.edu
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Textbook Essential Cell Biology, 6th edition By Alberts et al. The course textbook is available through the CSU Bookstore. There is very little difference between the 6th edition and two previous editions. Older textbooks should suffice as general reference material

Prerequisites CHEM 111 and CHEM 112 and LIFE 102

COURSE DESCRIPTION & OBJECTIVES

Course Description: To provide an integrated interdisciplinary molecular genetics experience for biomedically oriented students with backgrounds and interests in biochemistry, cell and molecular biology, microbiology, developmental biology, and genetics. In essence, this course covers the major paradigm of DNA → RNA → Protein.
• Understand the basic features of the molecules and macromolecules of genetics: nucleic acids, chromosomes, chromatin, proteins.
• Understand the molecular processes of the central dogma of molecular genetics: replication, DNA repair, recombination, transcription, RNA processing, translation.
• Know the principles of the fundamental experimental techniques used in molecular genetics.
• Understand the principles of genome evolution.
• Understand the molecular and cellular processes involved in molecular genetics: cell cycle/mitosis, meiosis, development, cancer.

How to Study
Come to the lectures prepared (know something about what we will talk about) having looked over the lecture outlines. A look at the textbook pages pertinent to the topic to be covered could also be helpful. Participate with your iClicker when questioned. Use the learning quizzes to become familiar with the topics covered and the type of question will provide you insight into the MCQs on the exams. For the test quizzes, study your notes including key terms and concepts, and then take the quiz the first time and note your answers. If you do not do as well as you would like, review your notes again and take the quiz a second time. Invest time into the writing assignments, those are good practice for the short answer questions in exams. Lastly, every lecture starts with a slide listing the principal concepts/aspects. If you can elaborate and explain each after studying, you should be well prepared. Remember, you should allocate as much time for organizing your learned material as you use for leaning the material. Engage in a study group, it is effective approach to learning. Explain processes and concepts to others.

COURSE MATERIALS & EQUIPMENT

Organization of content: Life 201B consists of 6 modules/units comprised of readings, lectures, learning & test quizzes, and written assignments as well as iClicker questions. Students should complete all tasks in each module before moving on. We will provide materials on Canvas to help you grasp my organization of the course content. These materials define what concepts we want you to know and understand. The materials also aid your study outside of class.

1. 6 Module with detailed outlines
2. Lecture slides
3. Homework-written assignments
4. Learning quizzes – online, unlimited number of trials but requires 100% correct answers
5. Test quizzes – online, limited number of trials (2), scored points depends on correct answers
6. iClicker questions at the beginning and during lectures.

Last add/drop and W-drop days
Wednesday February 1st – last add/drop day; you will have taken 2 quizzes by then.
Friday April 14th – last course withdrawal day (with W grade); you will have taken 8 quizzes & 3 exams by then.
EXAMS, QUIZZES, WRITTEN ASSIGNMENTS

Each of the 5 exams in LIFE 201B will be worth 100 points (500 total). In addition, there will be 6 learning quizzes (on-line) worth 10 points each (60 total), and additional 5 test quizzes worth 20 points each (100 total). Over the course of the semester, a total of 5 written assignments are required covering each module guided by broader questions, each worth 20 points (100 total). Lastly, each lecture will begin with 1-2 iclicker questions pertinent to the previous lecture and at least 1 iclicker question during the lecture on material covered. Each participation will by logged at 1 point per questions regardless whether your answer was correct. You can accumulate a total of 40 points over the course of the semester. Together, the cumulative total for this class amounts to 800 points. In summary, 37.5% of your total grade is derived from assignments other than the major exams. For instance, acquiring the maximum points with iClicker, you will improve your total by 5% which is substantial to move you into a higher grade category (see below).

iClickers

You will require either an iClicker remote, or a mobile device with the iClicker application installed to participate in, and receive credit for in-class participation. iClicker is a response system that allows you to respond to questions we pose during class. In order to receive this credit, you will need to register your iClicker remote (or the mobile device application) by the first Friday of the semester (January 19th, 2023). For information on iClicker software/hardware, please go to the following website for instructions: https://canvas.colostate.edu/iclicker/student-information/

**iClicker will be used every day in class, and you are responsible for bringing your device daily.**

There will be no make-up exams offered. Unexcused absences from an exam or any other activity (quizzes, written assignments, iclicker) will be given a zero. If you have an excused absence (based on written or other verifiable evidence) from an exam or quiz, your final grade will be based on a percentage of the total possible points for the exams and quizzes you did take. Alternatively, students can schedule to take the exam shortly after with the instructor if they know they cannot take the exam (only if they have an excused absence such as health emergency or family urgent issue) at the regularly scheduled date and time. If you have questions concerning the grading of any of your exams or quizzes, the questions you want re-graded should be discussed with the instructor within a week of grading. You must also provide a written explanation as to why you feel the question should be re-graded. Exams will not be accepted for re-grading after this one-week period, so go over your exam carefully soon after it has been returned to you.

Although this is a large class, we will aim to return exams and written assignments within 7 business days.
# Grading Policy

<table>
<thead>
<tr>
<th>Assignment*</th>
<th>Grade Points</th>
<th>Grade Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>500</td>
<td>62.5%</td>
</tr>
<tr>
<td>Learning Quizzes</td>
<td>60</td>
<td>7.5%</td>
</tr>
<tr>
<td>Test Quizzes</td>
<td>100</td>
<td>12.5%</td>
</tr>
<tr>
<td>Written assignments</td>
<td>100</td>
<td>12.5%</td>
</tr>
<tr>
<td>iClicker Q&amp;A</td>
<td>40</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>800</strong></td>
<td><strong>100%</strong></td>
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*Keep a copy of all work created for the course, including work submitted through Canvas course learning management system.

If you achieve the following point totals for LIFE 201B you will be assured the **minimum** letter grade shown:
1. ≥90%: A
2. 80-89.9%: B
3. 70-70.9%: C
4. 60-60.9%: D
5. <60%: F

Each exam or quiz will not be curved individually, but the final total points for a course grade might be curved depending on the averages and distribution of points. In addition, your grade for LIFE 201B will be determined based on the total 800 points (combined). Students in LIFE 201B have averaged around 80% of the total points possible over the past several years. As a result, there is usually no grading curve.

As a student enrolled in this course, one of your **responsibilities** is to submit course work by the **due dates** listed in Canvas.

To that end, it is our commitment to you to respond individually to the work you submit in this class and to return your work in a timely manner. Assignments will be returned within 7 business days, if, however, due to unforeseeable circumstances, the grading of your work takes longer than the times we have listed here, we will keep you informed of our progress and make every effort to return your work with feedback as soon as we can.

# Canvas Information & Technical Support

Canvas is where course content, grades, and communication will reside for this course.

- [Login for Canvas](#)
- [Canvas Support](#)
- For passwords or any other computer-related technical support, contact the [Central IT Technical Support Help Desk](#).
The Technical Requirements page identifies the browsers, operating systems, and plugins that work best with Canvas. If you are new to Canvas quickly review the Canvas Student Orientation materials.

**ACADEMIC INTEGRITY & CSU HONOR PLEDGE**

This course will adhere to the CSU Academic Integrity/Misconduct policy as found in the General Catalog and the Student Conduct Code. Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I will ask that you affirm the CSU Honor Pledge as part of completing your work in this course. Further information about Academic Integrity is available at CSU’s Academic Integrity - Student Resources.

**Universal Design for Learning/Accommodation of Needs**

I am committed to the principle of universal learning. This means that our classroom, our virtual spaces, our practices, and our interactions be as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning. If you are a student who will need accommodations in this class, please contact me to discuss your individual needs. Any accommodation must be discussed in a timely manner. A verifying memo from The Student Disability Center may be required before any accommodation is provided.

The Student Disability Center (SDC) has the authority to verify and confirm the eligibility of students with disabilities for the majority of accommodations. While some accommodations may be provided by other departments, a student is not automatically eligible for those accommodations unless their disability can be verified and the need for the accommodation confirmed, either through SDC or through acceptable means defined by the particular department. Faculty and staff may consult with the SDC staff whenever there is doubt as to the appropriateness of an accommodative request by a student with a disability.

The goal of SDC is to normalize disability as part of the culture of diversity at Colorado State University. The characteristic of having a disability simply provides the basis of the support that is available to students. The goal is to ensure students with disabilities have the opportunity to be as successful as they have the capability to be.

Support and services are offered to students with functional limitations due to visual, hearing, learning, or mobility disabilities as well as to students who have specific physical or mental
health conditions due to epilepsy, diabetes, asthma, AIDS, psychiatric diagnoses, etc. Students who are temporarily disabled are also eligible for support and assistance. Any student who is enrolled at CSU, and who self-identifies with SDC as having a disability, is eligible for support from SDC. Specific accommodations are determined individually for each student and must be supported by appropriate documentation and/or evaluation of needs consistent with a particular type of disability. SDC reserves the right to ask for any appropriate documentation of disability in order to determine a student’s eligibility for accommodations as well as in support for specific accommodative requests. The accommodative process begins once a student meets with an accommodations specialist in the SDC.

Third-party Tools/Privacy

Please note that this course may require you to use third-party tools (tools outside of the Canvas learning management system), such as Skype and others. Some of these tools may collect and share information about their users. Because your privacy is important, you are encouraged to consult the privacy policies for any third-party tools in this course so that you are aware of how your personal information is collected, used and shared.

Copyrighted Course Materials

Please do not share material from this course in online, print, or other media. Course material is the property of the instructor who developed the course. Materials authored by third parties and used in the course are also subject to copyright protections. Posting course materials on external sites (commercial or not) violates both copyright law and the CSU Student Conduct Code. Students who share course content without the instructor’s express permission, including with online sites that post materials to sell to other students, could face appropriate disciplinary or legal action.

Undocumented Student Support

Any CSU student who faces challenges or hardships due to their legal status in the United States and believes that it may impact their academic performance in this course is encouraged to visit Student Support Services for Undocumented, DACA & ASSET for resources and support. Additionally, only if you feel comfortable, please notify your professor so they may pass along any additional resources they may possess.

FOOD INSECURITY

Any CSU student (along with faculty and staff) who is experiencing food insecurity can receive support from the Rams Against Hunger program. Services include a food pantry, a meal-swipe program, pocket pantries, and in-person assistance with navigating federal aid eligibility. The RAH page includes numerous resources as well as county, state and federal programs which are described and linked.

Title IX/Interpersonal Violence
For the full statement regarding role and responsibilities about reporting harassment, sexual harassment, sexual misconduct, domestic violence, dating violence, stalking, and the retaliation policy please go to: Title IX – Sexual Assault, Sexual Violence, Sexual Harassment.

If you feel that your rights have been compromised at CSU, several resources are available to assist:

- Student Resolution Center, 200 Lory Student Center, 491-7165
- Office of Equal Opportunity, 101 Student Services, 491-5836

A note about interpersonal violence: If you or someone you know has experienced sexual assault, relationship violence and/or stalking, know that you are not alone. As instructors, we are required by law to notify university officials about disclosures related to interpersonal violence. Confidential victim advocates are available 24 hours a day, 365 days a year to provide support related to the emotional, physical, physiological and legal aftermath of interpersonal violence. Contact the Victim Assistance Team at: 970-492-4242.

**Religious Observances**

CSU does not discriminate on the basis of religion. Reasonable accommodation should be made to allow individuals to observe their established religious holidays. Students seeking an exemption from attending class or completing assigned course work for a religious holiday will need to fill out the Religious Accommodation Request Form and turn it in to the Division of Student Affairs, located on the second level of the Administration building. Once turned in, the Division of Student Affairs will review the request and contact the student accordingly. If approved, the student will receive a memo from the Dean of Students to give to their professor or course instructor.

Students are asked to turn in the request forms as soon as the conflict is noticed. Similarly, unanticipated conflicts requiring a religious observance, such as a death in the family, can also be reviewed.

**CSU Principles of Community**

**Inclusion:** We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents and contributions.

**Integrity:** We are accountable for our actions and will act ethically and honestly in all our interactions.

**Respect:** We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

**Service:** We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

**Social Justice:** We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.
DIVERSITY AND INCLUSION

The Mission, Vision, and Focus webpage of the Vice President for Diversity includes a comprehensive statement of CSU’s commitment to diversity and inclusion.

STUDENT PARENTS/GUARDIANS/CAREGIVERS

I realize that student parents/guardians and caregivers face distinctive challenges in succeeding academically, and I’m committed to supporting those of you who are parents to achieve our course’s learning outcomes. If you encounter challenges in meeting course expectations – for example, fulfilling attendance and participation requirements or submitting assignments due to a child or person in your care’s illness, essential appointment, school closure, etc. – please contact me as soon as possible (beforehand if feasible or as soon afterward you reasonably can if not). We’ll develop a plan for you to make up missed work. If you need to bring your child or person you care for to class, for example because you’re nursing or planned childcare became unavailable, I encourage you to do so if it’s feasible for you to participate in class and support your child or person in your care.

Finally, know that pregnant and parenting students are guaranteed equal educational opportunities by Title IX; know your rights, the protections provided, and how to advocate for yourself.

STUDENT CASE MANAGEMENT

Student case management is available to help students with extenuating life circumstances and connect them with resources. In some cases, after you and I discuss your situation, I may request verifiable documentation for class absences from the SCM office if you request considerations for absences or missed coursework.

MENTAL HEALTH AND WELLNESS

CSU is a community that cares. You are not alone. CSU Health Network Counseling Services has trained professionals who can help. Your student fees provide access to a wide range of support services.

Call Counseling Services at (970) 491-6053, and they will work together with you to find out which services are right for you.

Visit https://health.colostate.edu/about-counseling-services to learn more and https://health.colostate.edu/mental-health-resources/ for additional student mental health and well-being resources. An extensive set of mental health resources is available to CSU students: https://health.colostate.edu/mental-health-resources/

If you are concerned about a friend or peer, use Tell Someone by calling (970) 491-1350 or visiting https://supportandsafety.colostate.edu/tell-someone/ to share your concerns with a professional who can discreetly connect the distressed individual with the proper resources.

Rams Take Care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.
SPRING 2024 COVID INFORMATION

Important information for students: All students are expected and required to report any COVID-19 symptoms to the university immediately, as well as exposures or positive tests from a non-CSU testing location.

If you suspect you have symptoms, or if you know you have been exposed to a positive person or have tested positive for COVID, you are directed to fill out the COVID Reporter (https://covid.colostate.edu/reporter/). If you know or believe you have been exposed, including living with someone known to be COVID positive, or are symptomatic, it is important for the health of yourself and others that you complete the online COVID Reporter. Do not ask your instructor to report for you. If you do not have internet access to fill out the online COVID-19 Reporter, please call (970) 491-4600. You may also report concerns in your academic or living spaces regarding COVID exposures through the COVID Reporter. You will not be penalized in any way for reporting. When you complete the COVID Reporter for any reason, the CSU Public Health office is notified. Once notified, that office will contact you and, depending upon each situation, will conduct contact tracing, initiate any necessary public health requirements and notify you if you need to take any steps.

For the latest information about the University’s COVID resources and information, please visit the CSU COVID-19 site: https://covid.colostate.edu/.