LIFE 201B Honors Recitation

INSTRUCTOR INFORMATION

Instructor: Dr. **Narasimha Sreerama** (Sree)

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Communication Policy: Responses to emails will be provided within 24 hours

PREREQUISITES FOR COURSE

Life102; C111 and C112, or concurrent registration

COURSE DESCRIPTION & OBJECTIVES

The Honors breakout for LIFE201B (LIFE-202B) expands on Molecular Genetics covered in LIFE201B. It adds another layer to the learning material, as students work on assignments that go beyond what is covered in class. It also requires students to improve their time-management skills and work ethics. Furthermore, Honors breakout adds another component on college experience as students work in groups on some controversial topics in genetics and develop skills to influence others.

After completing this course, a successful student will be able to:

- Develop the critical thinking skills for (1) analyzing and interpreting readings and/or assignments and (2) articulating and defending one's positions in written assignments and in-class discussions.
- Participate in class discussions while respecting the views of others.

TEXTBOOK / COURSE READINGS

Instructor provided material, including notes and published papers.

Text Book used in LIFE 201B. **Essential Cell Biology. Alberts et al., 5th edition,** New York: W.W. Norton & Company [ISBN 97803936679533]. A Free Book provided by NIH: **Molecular Biology of the Cell, Alberts et al, 4th ed (2002)** may work as a substitute**.** Free searchable access at: https://www.ncbi.nlm.nih.gov/books/NBK26863/

COURSE MATERIALS & EQUIPMENT

Course content will be delivered remotely and asynchronously. A Laptop or a PC and internet to access online course material and assessments

Material is posted periodically. Please keep up with the pace of the course. Class time (on Zoom) will be for doing or reviewing assignments and presentations.

Zoom Details: Meeting ID: **935 211 9718**; Password: **BCLIFE**

PARTICIPATION/BEHAVIORAL EXPECTATIONS

Students are expected to access Canvas regularly for course related activities.

Course work involves: (1) A 30–min oral presentation of a topic selected by the student and approved by the instructor, (2) Evaluation of oral presentations, (3) Specific assignments – these go beyond what was discussed in class, and students are provided with supplemental information to assist them and involve analyzing and solving problems on selected topics covered in class, and (4) Analysis of certain controversial topics. The last two (3 and 4) involve students working individually initially (20 min) and working in groups (20 min).

Please review the core rules of netiquette for some guidelines and expectations on how to behave in an online learning environment.

COURSE POLICIES (LATE ASSIGNMENTS, MAKE-UP EXAMS, ETC.)

Class Participation

Student participation in weekly meetings is mandatory. **Any absence, not approved by the instructor, would result in a 5% grade-penalty.**

Honors competencies self-assessment. Honors courses are intended to assist student competencies in critical thinking; creativity and problem solving; interdisciplinary learning integrated with global &/or cultural viewpoints and professionalism, interpersonal skills, & emotional intelligence. The assignment is due at the end of Week 4. Students must include comments for all four categories for full credit.

This assignment addresses the University Honors Program competencies of critical thinking and professionalism, interpersonal skills, & emotional intelligence.

Writing and Problem Solving Assignment

Students come prepared for **the problem-solving assignments, using the supplemental material posted on Canvas** for the specific assignment. Student participates fully, and summarizes the analysis both individually and as a member of a group. This exercise evaluates problem-solving skills, critical thinking skills, and articulating and influencing peers.

This assignment addresses the University Honors Program competencies of critical thinking; creativity and problem solving; and interdisciplinary learning integrated with global &/or cultural viewpoints.

Oral Presentation Assignment

Students prepare a **one-page summary (to be given to all participants, instructor, and GTAs)** plus references that analyzes, interprets, and evaluates an aspect of a preselected topic. Student shall make a **30-min formal presentation** to the class, followed by questions form the audience.

This assignment addresses the University Honors Program competencies of critical thinking; creativity and problem solving; and interdisciplinary learning integrated with global &/or cultural viewpoints.

WEEKLY SCHEDULE **Tentative (7 assignments; 7 days for Oral Presentations)**

Below is the tentative schedule of topics and reading assignments.

> **Week 1: Introduction**
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> **Week 2: DNA/RNA structure and analysis – Assignment 1**
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> **Week 3: Chromosomes – Assignment 2**
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> **Week 4: OPEN for Oral Presentations**
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> **Week 5: OPEN for Oral Presentations**
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> **Week 6: Transcription – Assignment 3**
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> **Week 7: OPEN for Oral Presentations**
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> **Week 8: OPEN for Oral Presentations**
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> **Week 9: Genome Evolution – Assignment 4**
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> **Week 10: OPEN for Oral Presentations**
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> **Week 11: OPEN for Oral Presentations**
>
> **Week 12: Genomics – Assignment 5**
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> **Week 13: OPEN for Oral Presentations**
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> **Week 14: Case Study – Assignment 6**
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> **Week 15: Case Study – Assignment 7**
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> **Week 16: Finals Week**

GRADING POLICY

Grade	Range
A	100% to 90%
B	89.9% to 80%
C	79.9% to 70%
D	69.9 %to 60.0%
F	Below 60%

As a student enrolled in this course, one of your responsibilities is to submit course work by the due dates listed in Canvas. With that said, I take my role as your instructor very seriously, and, in fact, I care about how well you do in this course and that you have a satisfying, rewarding experience.

To that end, it is my commitment to you to respond individually to the work you submit in this class and to return your work in a timely manner.

The assignments that are used to evaluate student learning are:

1. Discussions (Weekly assignments involving problems solving). Responses in the assignments. (25% of grade)
2. Writing assignment (25% of grade). The writing assignment will be in the form of a traditional academic essay (summary of presentation, discussions in assignments)

3. Participation (20% of grade). This includes in-class discussion and grading for the PICC self-assessment.

ASSIGNMENT	GRADE POINTS	GRADE PERCENTAGE
Participation	20	20%
Problem Solving (assignments)	25	25%
Writing (Summary of a topic, assignments)	25	25%
Oral Presentation	30	30%
Total:		**100 %**

*Keep a copy of all work created for the course, including work submitted through Canvas course learning management system.

CANVAS INFORMATION & TECHNICAL SUPPORT

Canvas is the 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.
    - (970) 491-7276 ○
      help@colostate.edu

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 student 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.

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.

Competencies for Honors Students Exercise ("PICC" Feedback)

The CSU University Honors Program has identified four general competencies that should be incorporated in each Honors course. These skills include

(1) **P**rofessionalism, interpersonal skills, and emotional intelligence;

(2) **I**nterdisciplinary learning integrated with global and/or cultural viewpoints;

(3) **C**ritical thinking; and

(4) **C**reativity and problem solving.

This is a two-stage process. First, students complete a **self-evaluation of these skills at the beginning of the semester**. Second, at the end of the semester instructors will provide feedback for each student, based on assignments and activities.

The feedback is part of the University Honors Program; it is for advising purposes only and is confidential. It is not part of a student's grades or academic record. A standardized rubric is used to provide feedback for growth in these areas and to measure the Honors Programs progress in helping students to develop these skills through their academic career. The feedback categories and activities/assignments used to evaluate students are listed below and noted in the assignment descriptions.

Skill Category (PICC)	Relevant Course Activities & Assignments
1. Professionalism, interpersonal skills, & emotional intelligence: Acts ethically & positively to foster a supportive instructional or work environment. Has the emotional intelligence (ability to perceive, evaluate, & manage emotions) & interpersonal skills to work effectively with others.	• Class participation & conduct • Discussion question assignments
2. Interdisciplinary learning integrated with global &/or cultural viewpoints: Integrates diverse knowledge, perspectives, &/or skills into arguments &/or strategies; is aware of and can clearly incorporate global &/or cultural perspectives to an argument or issue.	• Class discussions • Discussion question assignments • Writing project
3. Critical thinking: Student advances a position with specific theses or hypotheses & can conceptualize ideas or lines of thought. Conclusions and related outcomes acknowledge complexities of an issue (implications and consequences) and recognize differing points of view. Formulates & develops claims with sufficient support, including reasoning, evidence, & persuasive appeals, & proper attribution where necessary. Uses written and oral communication effectively in persuasive arguments.	• Class discussions • Discussion question assignments • Writing project
4. Creativity & problem solving: Creatively applies discipline-based and/or cross-discipline-based knowledge to discover and design a variety of forms often using a problem-solving strategy	• Class discussions • Discussion question assignments • Writing project

Instructions for Completing the Student self-evaluation using PICC form

1. Click this link, or go to honors.colostate.edu/picc in your web browser.
2. Log in with your eName and password.
3. Click on the blue "Create New" button at the top of the page to bring up the PICC Entry Form.
4. At the top of this new page is a link to the full PICC rubric, which you should review before completing the form.
5. The Assessment Type, Student, and Semester fields should be filled in for you.
6. Choose your instructor from the drop down menu.
7. Choose the course for which you are filling out this evaluation from the drop down menu.
8. Choose the level (B, D, P, and M, for basic, developing, proficient, and mature, respectively) for each of the four skill categories. Note that comments justifying why you chose this level are required.
9. If you have any general comments, add them to the general comments field. This field is optional.
10. Once you have checked to ensure the form is correct, click the 'Submit' button. All done!

If you have any questions or technical problems, email Honors Tech Support at honorstechsupport@colostate.edu

Participation Grading Rubric

Participation is graded on a scale from 0 (lowest) through 4 (highest), using the criteria below. The criteria focus on what you demonstrate and do not presume to guess at what you know but do not demonstrate. This is because what you offer to the class is what you and others learn from. I expect the average level of participation to satisfy the criteria for a "3".

Grade	Criteria
0	Absent.
1	Present, not disruptive. Tries to respond when called on but does not offer much. Demonstrates very infrequent involvement in discussion.
2	Demonstrates adequate preparation: knows basic case or reading facts, but does not show evidence of trying to interpret or analyze them. Offers straightforward information (e.g., straight from the case or reading), without elaboration or very infrequently (perhaps once a class). Does not offer to contribute to discussion, but contributes to a moderate degree when called on. Demonstrates sporadic involvement.
3	Demonstrates good preparation: knows case or reading facts well, has thought through implications of them. Offers interpretations and analysis of case material (more than just facts) to class. Contributes well to discussion in an ongoing way: responds to other students' points, thinks through own points, questions others in a constructive way, offers and supports suggestions that may be counter to the majority opinion. Demonstrates consistent ongoing involvement.
4	Demonstrates excellent preparation: has analyzed case exceptionally well, relating it to readings and other material (e.g., readings, course material, discussions, experiences, etc.). Offers analysis, synthesis, and evaluation of case material, e.g., puts together pieces of the discussion to develop new approaches that take the class further. Contributes in a very significant way to ongoing discussion: keeps analysis focused, responds very thoughtfully to other students' comments, contributes to the cooperative argument-building, suggests alternative ways of approaching material and helps class analyze which approaches are appropriate, etc. Demonstrates ongoing very active involvement.

This course will adhere to the CSU Academic Integrity Policy as found in the General Catalog – 1.6, pages 7-9 (http://www.catalog.colostate.edu/Content/files/2012/FrontPDF/1.6POLICIES.pdf) and the Student Conduct Code (http://www.conflictresolution.colostate.edu/conduct-code). At a minimum, violations will result in a grading penalty in this course and a report to the Office of Conflict Resolution and Student Conduct Services.

The Colorado Commission on Higher Education has approved **Life201B** for inclusion in the Guaranteed Transfer (GT) Pathways program in the

GT-SC2 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 http://highered.colorado.gov/academics/transfers/gtpathways/curriculum.html.

The content criteria and student learning outcomes (SLOs) listed below are required for GT-Pathways courses in the Natural and Physical Sciences content area, in the GTSC-2(Lecture course without required laboratory) category. The peculiar numbering of the SLOs is due to the fact that they are excerpted from a comprehensive list of SLOs across all GT-Pathways courses. The SLOs are listed within categories that the GT-Pathways program calls "competencies" and are displayed in italics below.

GT Pathways Natural & Physical Sciences - Course without Required Laboratory (GT-SC2) Content Criteria:

1. The lecture content of a GT Pathways science course (**GT-SC2**):
   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.

GT Pathways Natural & Physical Sciences - Course without Required Laboratory (GT-SC2) Competencies:

Inquiry & Analysis

4. Select or Develop a Design Process

   a. Select or develop elements of the methodology or theoretical framework to solve problems in a given discipline.
5. 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.
6. Draw Conclusions
   a. State a conclusion based on findings.
Quantitative Literacy
   1. Interpret Information
      a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
   2. Represent Information

      a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).