

BISC 150: The Nature of Human Health & Disease

4 units, Spring 2021

Tuesday & Thursday – 9:30-10:50am

Room: ONLINE

Labs

Tues, 12:00 – 1:50 pm

Wed, 10:00 – 11:50 am; 12:00 – 1:50 pm

Room: Zoom meeting

Instructor: Raffaella Ghittoni, Ph.D.

Office: ONLINE

Office Hours: ONLINE: Tuesday & Thursday 11:00am – 12:00pm

Contact Info: rghitton@usc.edu (Subject line should state “BISC 150”)

Instructor: Nancy Castro, Ph.D.

Office: ONLINE

Office Hours: ONLINE: Tuesday & Thursday 11:00am - 12:00pm

Contact Info: ncastro@usc.edu (Subject line should state “BISC 150”)

Lab Manager: Celeste Chong-Cerrillo, Ph.D.

Office: Zoom ‘meeting room’

Office Hours: By appointment

Contact Info: chongcer@usc.edu (Subject line should state “BISC 150”)

Lab Instructor (LI): Shoujie Chai

Office Hours:

Contact Info: shoujie@usc.edu

Required Material & Texts:

Mastering Biology with Pearson e-Text – for Biology of Humans: Concepts, Applications and Issue, 6TH Edition. ISBN-10: 9780134389233 (required book is e-text not hard copy).

Authors: Judith Goodenough & Betty A. McGuire.

Personal computer with internet access

Webcam and microphone (either built into computer or separate devices)

Zoom 5.0 software

Respondus Monitor/LockDown Browser

Course Description

The Nature of Human Health and Disease course is designed to bring students to a level of understanding of basic human biology, health, and disease, as well as modern biomedical science that will enable them to make rational decisions on personal, ethical, and political issues in their health. This level will be reached through lectures, reading of texts, papers and news media, and laboratory experiments.

Prerequisite(s): no prerequisites

Course Notes

BISC 150Lg is a participatory course. A research project will lead students to become true experts in a subject of their choice and laboratory simulations will give an appreciation of biotechnology.

Learning Objectives

- Students will understand basic human biology at the genetic, cellular and physiological levels.
- Students will know the human body maintains a healthy balance and how disturbances of this balance underlie diseases.
- Students will be familiar with modern biomedical scientific approaches to treating disease.
- Students will be able to make informed contributions to discussions of contemporary issues in health and disease with their peers.
- Students will be able to make rational decisions on personal, ethical and political issues in their health.

Topic List:

General Biology Introduction:

Human physiology, cell and molecular biology, Mendelian genetics

1) Nutrition and Health

- a) Nutrition basics
- b) Supplements/Fad diets
- c) Diabetes

2) Microbiology, Infectious Disease and Vaccines

- a) STDs (HIV)
- b) Influenza/Common cold
- c) Bacterial infection-
- d) Human microbiome
- e) How they work and myths—autism, ethics of vaccinating/not vaccinating

3) Evolutionary Biology of Health and Infection

- a) Co-evolution of humans and infectious disease
- b) Third world disease/Global health

4) Genetic Inheritance and Disease

- a) Single gene traits
- b) Complex disease traits—Bipolar disorder, Depression
- c) Cancer
- d) Mental Health

5) Health Care Administration

- a) Health insurance
- b) Drug design/False advertising

6) Drug Effects and Abuse

- a) Prescription Drugs
- b) Street Drugs
- c) Alcohol
- d) Tobacco and Cannabis

Term Research Project. Your Research Project consists of 2 components: Outline and Paper, each receiving a grade. Refer to the “*Guidelines for Term Research Project*” document for details regarding this assignment. Your topic must be approved by your LI no later than 5 p.m. Friday, February 26, 2021. The Outline is due no later than 5 p.m. Thurs, March 11, 2021 and the Paper no later than 5 p.m. on Friday, April 2, 2021. An electronic copy of both your Outline and Research paper will be submitted through your LAB Blackboard site, under “Assignments”. You cannot email your paper to your LI. Please refer to the Late Policy below.

The entire Research Project must be an **ORIGINAL WORK** by the student involved. *We will only allow a maximum of 3 one-sentence quotes for the entire paper.* Plagiarism is strictly forbidden and will be treated with the usual University rules if it is encountered (see below). You are also NOT allowed to use a paper you have written for a previous course or submitted to another instructor from ANY educational institution.

Academic Dishonesty Tutorial

All students must complete the Academic Dishonesty tutorial which can be found in the following link (<https://libraries.usc.edu/research/reference-tutorials>) (Flash Version). Click on the link and complete the tutorial and your certificate. Once you take a screenshot of your certificate, you can either upload the picture file or paste it into a word document and upload it as a doc or pdf file as completion of your assignment. The assignment will be posted under the COURSE Blackboard site. You must have this assignment turned in before 9 am on Friday, April 2, 2021. This assignment is not worth any points but a penalty of ½ pt per day will be applied for certificates received after the due date. This can add up to a 10 pt deduction by the end of the semester.

Blackboard and Posting of Grades. Blackboard (<https://blackboard.usc.edu/>) lists BISC 150 lecture and lab sections as “separate courses”. All grades (lecture and lab) are posted in your LAB section. However, be sure to check for additional postings and announcements both in the lecture section and the lab section on a weekly basis. Blackboard is a convenient system to communicate grades; however, **those grades are not authoritative**. It is the student’s responsibility to notify your TA or Lab Manager ASAP in the event of any mistakes in your posted grade.

Please remember that (1) the course mean given on Blackboard is also NOT authoritative, and (2) that only the total number of points earned determines your course grade. We will be glad to discuss your performance, and your possible grades, at any time throughout the course. Help provided in this way should be considered only provisional. Your later performance may change (sometimes dramatically) the best- meant extrapolation.

Email Communication:

To ensure privacy, only student’s USC email accounts may be used for email communications. Students are responsible for understanding the content of email messages that the instructor sends to their USC accounts. Therefore, each student must check their USC email regularly and make sure their account is not over quota, so new messages can be received.

Grading Breakdown

The course grade will be based upon **748 possible points**:

Assignment	Points	% of Grade
Midterm 1	100	13.37
Midterm 2	100	13.37
Final Exam	100	13.37
At-home Quizzes	48 pts (3pts/lecture)	6.42
In-class problem sets	80 pts (5pts/lecture)	10.7
Critical Assessment	30	4
Term Research Project	85	11.4
Laboratory grade	205	27.4
Total	748	100

Grading Scale

Course final grades will be determined using the following scale:

A	90.1 - 100
A-	86.7 - 90
B+	83.3 - 86.6
B	80 – 83.2
B-	76.7 – 79.9
C+	73.3 – 76.6
C	70 – 73.2
C-	66.7 – 69.9
D+	63.3 – 66.6
D	60 – 63.2
D-	56.7 – 59.9
F	≤56.6

Assignment Submission Policy

Join Educational Partnership. There will be an opportunity for a small percentage of the class to participate in a K-12 educational program with the Joint Educational Project (JEP) at USC. This is a semester-long commitment and you will receive extra credit in the class based on your performance in the program. The maximum amount of extra credit points a student can receive is 50 points and participation is capped at 10% of class enrollment.

At-home Quizzes & In-class assignments: Before coming to each lecture, you will be required to study the material and answer quiz questions. Each quiz assignment will be worth 3 points and based on the upcoming lecture material. Quiz answers should be submitted prior to the start of class at 9:30 a.m on Mastering Biology. Quizzes will typically be open 48 hours in advance of the next lecture. Each lecture will have an in-class assignment on Modified Mastering Biology whereby students will be given 24 hours post-lecture to complete this assignment. Attendance at all lecture sections is expected. If you must miss class due to illness or valid USC travel, please present Dr. Castro or Dr. Ghittoni with evidence of the reason for absence and you will be allowed to make-up in-class work assignments within **1 week** of the missed lecture period.

Participation:

Each guest lecture will require mandatory attendance. Signing in will occur within the first 15 minutes of class, afterwards no credit will be given.

Critical Assessments (CA). Critical assessments are short papers evaluating and discussing science in the media. There will be 2 CA and more detailed information will be posted on your LAB Blackboard. CAs are due before 5:00 pm on Friday, February 12, 2021 and Friday, March 19, 2021.

Exams. There will be 2 midterm exams during the semester and 1 final exam. Exams will consist of multiple choice, short answer, matching or fill-in-the-blank questions. Exams are NOT open book nor open notes. A student is not allowed to start an exam after the first student has left ANY exam room. You will be required to write your full name on EACH page of the exam. If you fail to do so, ½ point will be deducted for each page missing a full name.

You will be required to use Respondus Monitor/LockDown Browser during the entire exam for proctoring purposes. Once LockDown Browser is installed, start LockDown Browser, log into your Blackboard, and navigate to the test. (Note: You won't be able to access tests with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.) There will be a Respondus Monitor onboarding protocol that you will need to complete before starting any exam; it involves a "Webcam Check" and "System & Network Check" to make sure everything is working properly.

Respondus Monitor and LockDown Browser. This course requires each student to download the LockDown Browser software. You must download and install LockDown Browser from the following link onto your computer: <https://download.respondus.com/lockdown/download.php?id=945755274> Each midterm exam will be administered using the Lockdown Browser program and a webcam and microphone (Respondus Monitor) for online exams.

Grading Timeline

Grades for Midterm Exams will be posted within one calendar week following the exam date.

Additional Policies

Missed exams. There are no makeup exams in the course. If a student misses an exam due to a true emergency, official written documentation (what you feel is appropriate to demonstrate a legitimate reason for missing said exam) should be submitted to the Instructors, Dr. Raffaella Ghittoni or Dr. Nancy Castro, **within two (2) days of the missed exam.** Students will only be excused for ONE exam with a valid excuse. If it is a medical excuse, you must also state *in writing* (a) the doctor's name and phone number and (b), a signed statement authorizing us to discuss with the doctor whether you were too ill to take the exam. (Note that neither you nor the physician need to tell us the nature of your illness.) Your physician has to be licensed to practice medicine by the State of California (www.medbd.ca.gov) and that it's considered unethical and unwise for a physician to provide medical care for a family member. We will contact the doctor and decide whether you have a valid excuse. If you do, the instructors may, at their discretion, permit the use of the student's performance on other exams in determining the missed exam grade. If your excuse is judged not to be valid, or you do not provide it within the allotted time, you will receive a score of zero for the missed exam.

Please note: the Student Health Center has changed their medical excuse policy. The Student Health Center will no longer provide: 1) class excuse notes for illness, 2) clinical appointments for class excuse, and 3) authentication of outside physician certificates. The Absence of Class - Self Verification Form provided by the Student Health Center is insufficient documentation for our purposes.

Re-grades of exam questions. Your midterm exams will be handed back either in lab or lecture and the answer key will be posted. If you feel an error was made in the grading of your exam, you must submit your exam, along with a Regrade Request Form in which you have thoroughly explained (typewritten) why you think your answer deserves more credit, to your TA within 1 week of the time it was returned to the entire class. Oral and email requests will not be considered. If you took the exam in pencil or used white-out, we will not grant regrade requests. The entire answer will be re-graded, not just the part you think deserves more credit. Your score may increase or decrease as a result of a re-grade.

Late Policy. For every 12-hour increment any assignment is handed in late, you will lose 10% of the total possible points [i.e., if the assignment is past 5 days (120 hrs) late, you will receive a zero (0) for that assignment]. Saturdays, Sundays, and University holidays ARE counted. The Labster simulations adhere to the 72-hr policy as stated in the Lab Syllabus.

Course Schedule: The Nature of Human Health and Disease

Wk	Date	Lecture Topic	Lec. #	Reading	Lecturer	Assignments
1	19-Jan	Overview: Humans in the world of biology	1	Ch. 1	Castro	
	21-Jan	Intro to cell biology	2	Ch. 3	Castro	Quiz & Prob. set
2	26-Jan	How your body gets its energy (Biochemistry)	3	Ch. 3	Castro	Quiz & Prob. set
	28-Jan	Body organization and homeo.	4	Ch. 4	Castro	Quiz & Prob. set
3	2-Feb	DNA, RNA, proteins and You! (Molecular Biology)	5	Ch. 21	Castro	Quiz & Prob. set
	4-Feb	Mutation, Biotechnology & GMOs	6	Ch. 21	Castro	Quiz & Prob. set
4	9-Feb	Genetics	7	Ch. 20	Castro	Quiz & Prob. set
	11-Feb	Genetic Diseases	8	Ch. 20	Castro	Quiz & Prob. set
5	16-Feb	Cancer	9	Ch. 21a	Castro	Quiz & Prob. set
	18-Feb	Midterm 1 (Lectures 1-8)				
6	23-Feb	Endocrine system	10	Ch. 10	Castro	
	25-Feb	Hormones Documentary	11		Castro	
7	2-Mar	Stem cells	12	Ch. 19a	Ghittoni	Quiz & Prob. set
	4-Mar	Immune system	13	Ch. 13	Ghittoni	Quiz & Prob. set
8	9-Mar	Immune system dysfunction	14	Ch. 13	Ghittoni	Quiz & Prob. set
	11-Mar	Human Immunodef. Virus-HIV	15	Ch. 17a	Ghittoni	Quiz & Prob. set
9	16-Mar	Human Microbiome	16	Ch.	Ghittoni	Quiz & Prob. set
	18-Mar	The digestive system	17	Ch. 15	Ghittoni	Quiz & Prob. set
10	23-Mar	Wellness day, No lecture				
	25-Mar	Midterm 2 (Lectures 9-17)				
11	30-Mar	Nutrition: Supplements/Fad diets	18	Ch. 15	Ghittoni	Quiz & Prob. set
	1-Apr	Nutrition Continued	19	Ch. 10a	Ghittoni	Quiz & Prob. set
12	6-Apr	Respiratory system	20	Ch. 14	Ghittoni	
	8-Apr	Respiratory system	21		Ghittoni	
13	13-Apr	HIV Documentary	22		Ghittoni	
	15-Apr	Guest Lecture	23	TBD		
14	20-Apr	Guest Lecture	24	TBD		
	22-Apr	Wellness day, No lecture				
15	27-Apr	Guest Lecture	25	TBD		
	29-Apr	Review Session			Castro/Ghittoni	
	TBD	FINAL EXAM (Lectures 18-25)				

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/scampus-part-b/>. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Support Systems:

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call free and confidential therapy services, workshops, and training for situations related to gender-based harm.

<https://engemannshc.usc.edu/rsvp/>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime.

Provides overall safety to USC community. <http://dps.usc.edu>

The Nature of Human Health and Disease Laboratory (ONLINE)

BISC 150Lxg

Spring 2021

Syllabus and Policies

The goal of the laboratory section of The Nature of Human Health and Disease is to enhance your overall learning experience for this course and help you grasp concepts discussed in the lecture. The lab will introduce you to experiments that deal with basic issues of biology and science as well as various techniques used in the biotechnology field. Many of the procedures and principles learned are widely applicable in many fields of biology.

Laboratory Director: **Dr. Chong-Cerrillo, Ph.D.**
Office Hours: Zoom 'meeting room', by appointment
Email: chongcer@usc.edu (the subject line should state: "BISC 150")

Lab Instructor (LI): TBD
Email:
Office Hours:

Required Material: Personal computer with internet access
Webcam and microphone (either built into computer or separate devices)
Zoom 5.0 software
Respondus Monitor/Lockdown Browser

Websites: Blackboard (Bb) (<https://blackboard.usc.edu/>)

Time Zone: All indicated times are Pacific Standard Time (PST) until Mar. 14, 2021 where it will then be Pacific Daylight Time (PDT).

Laboratory Grade

The laboratory grade, worth 205 points and accounting for ~27% of your total course grade, breaks down as follows:

Lab Safety Labster	5
11 Lab Sessions (15 points each)	165
<u>Lab Final Exam</u>	<u>35</u>
Laboratory Total	205

Remote Laboratory Policies

Attendance. As this course is offered entirely online, we will be using Zoom 5.0 and Blackboard for most instruction and communication. You are required to attend your Lab Instructor's Zoom lecture presentations so that you can interact with your LI and labmates. Students that cannot be present due to extreme time zone differences (± 5 hrs) will be excused. All lecture presentations will be recorded.

Blackboard. Blackboard (Bb) will list BISC 150 lecture and lab sections as "separate courses". Lab-related materials and documents^s, Zoom links and recordings, Labster links (see below), submission of lab assignments, and administration of the lab final exam will be in your LAB section. If you have problems acquiring any documents, please let your LI or the Lab Director know immediately.

Be sure to check for additional postings and announcements in both the lecture and lab section on a daily basis.

Zoom. Please log into Zoom (using **USC credentials only**) for the class and lab sessions a few minutes beforehand. During these Zoom sessions, please keep the ringer of your cell phone either off or on vibrate.

Labster. The majority of your lab experience will be through weekly virtual lab simulations offered by Labster (topics referenced with * in the schedule). You will need to log into Bb, go to your Lab Bb site where you will find the Labster Simulation link on the left-hand side. Each week's simulation will be available the day before your lab session.

It is highly recommended that you start and complete the simulations during your regularly scheduled lab session so that if you have any questions or want to discuss any topics, your LI will be readily available. However, in order to accommodate time zone differences, you'll have 72 hrs from the beginning of your lab session to complete the simulation (to 100% progress).

Throughout each simulation, you will perform specific lab activities and tasks. The points for each simulation will be earned from answering Quiz questions, based on theory and results, throughout these simulations. The score you receive from answering these questions will be automatically recorded and transferred to the Lab Bb Grade Center. You can watch these simulations as many times as you'd like, but **your first attempt score will be the one recorded** so **do not rush** through these simulations. You can also go to the Theory tab for help if you are not sure about an answer.

In order to receive 100% of your quiz score, you must complete the simulation to 100% progress; otherwise, your final score will be based on the percent completed. If you do not attempt to complete your lab simulation within the 72-hr time frame, you will receive a zero (0) for that simulation.

If you cannot complete a simulation within the 72-hr time frame due to a true emergency situation or extraordinary circumstance, it will be your responsibility to submit written documentation of your

excuse (what you feel is appropriate to demonstrate a legitimate reason) to the Laboratory Director, Dr. Chong-Cerrillo, within 24 hrs after the deadline. It will be at her discretion to determine whether your excuse is valid and whether the simulation can be made up. If documentation is not received within this time frame, you will receive a zero (0) for that simulation. Please note that *if the documented excuse does not cover all three days of the assignment, your request will be denied.*

Labster Minimum Requirements. Labster can be used on laptop- or desktop-based computers, which meet standard requirements. Labster will NOT work on iPads. All popular browsers are supported, but Google Chrome and Mozilla Firefox work the best; historically, students have had problems with Safari (so DO NOT use Safari).

Labster simulations are typically only 30MB or less in size, however, internet/Wi-Fi speed may affect the time it takes to load a simulation. Typically it only takes 1 - 5 minutes to load the entire simulation. *Try not to have multiple browser windows or tabs open while loading or doing the simulation.* If you experience technical issues or need help with the simulation app, please contact the Labster Help Center at <https://help.labster.com/en/>. Do not contact your LI or Lab Director as we will not be able to help you with any Labster technical issues.

§**Additional Lab Activities.** There are 3 lab sessions not offered through Labster. The general process is outlined below. More detailed information will be posted on the LAB Bb section.

Lab	Procedure	Available on	Assessment/Assignment	Due	Submit
Human Karyotyping	Follow instructions on document	Sun, Feb 21, 2021	Activity and questions on Lab Report	72 hrs from beginning of lab Upload Lab Report via "Assignments"	
Biology of Skin Color	Watch documentary	Sun, Feb 28, 2021	Questions on Lab Report		
How Safe Are We?	Watch documentary	Thur, Apr. 15, 2021	Short quiz on LAB Bb	Quiz available for only 45 min starting at the beginning of your regular lab time; 5 min to complete; required to start and complete it in one sitting	

Late Policy. For every 12-hour increment any assignment is handed in late, you will lose 10% of the total possible points [i.e., if the assignment is past 5 days (120 hrs) late, you will receive a zero (0) for that assignment]. Saturdays, Sundays, and University holidays ARE counted. The Labster simulations adhere to the 72-hr policy stated above.

Respondus Monitor and LockDown Browser. This course requires the use of LockDown Browser and a webcam and microphone (Respondus Monitor) for all online exams. You must download the software from the following link and install LockDown Browser onto your computer: <https://download.respondus.com/lockdown/download.php?id=945755274>

Lab Final Exam. The Lab Final Exam will be cumulative and will test your ***understanding*** of the topics, theory, concepts, experiments and results covered in the lab simulations and exercises. The final will be at the beginning of your lab session, have a time limit, and only available/open for a designated time frame. You will be required to use Respondus Monitor/LockDown Browser during the entire exam for proctoring purposes. Once LockDown Browser is installed, start LockDown Browser, log into your Lab Bb, and navigate to the test. (Note: You won't be able to access tests with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.) There will be a Respondus Monitor onboarding protocol that you will need to complete before starting any exam; it involves a "Webcam Check" and "System & Network Check" to make sure everything is working properly.

If a student needs accommodations based on time zone difference (± 6 hrs) or DSP, you must contact Dr. Chong-Cerrillo no later than 72-hr in advance of your lab session. To avoid multiple back and forth emails, please provide all the necessary information (i.e., time difference, lab section, etc.).

If you have prior knowledge that you will miss the final exam for a legitimate reason, discuss the situation with the Lab Director at least 2 weeks in advance. Be prepared to provide supporting official documentation.

If you miss the lab final due to a true emergency or extraordinary circumstance, it will be your responsibility to submit documentation of your emergency (what you feel is appropriate to demonstrate a legitimate reason) to the Laboratory Director, Dr. Chong-Cerrillo, within 24 hrs of the missed exam. It will be at her discretion to determine whether your excuse is valid and whether the exam can be made up. If documentation is not received within this time frame, or if it is deemed invalid, you will receive a zero (0) for the final exam.

Regrade Request. You will receive an announcement once your lab final exam has been graded. If you feel something should be reviewed for a regrade, you must submit a thoroughly typewritten document (as an email attachment, NOT within the body of the email) explaining why you think your answer deserves more credit to your LI within 48 hrs after announcement. Oral requests will not be considered. The entire question will be regraded, which may raise or lower your score.

Trojan Academic Integrity. Please remember that you are required to adhere to the Trojan Academic Integrity. You are not allowed to use someone else's data or answers to complete any simulation or assignment. You are not allowed to use any external assistance, including communicating with fellow students (e.g., texting, group chats, video calls, etc.) during or after the exam, possess or use any books, notes, calculator, or other inanimate resources, allow another student to copy from an exam, acquire or copy exam material, share exam material with another student. Any instruments that can convey exam questions and answers, such as cell phones, tablets, alternate computer, etc are prohibited.

Blackboard Posting of Grades/Scores. Blackboard is a convenient system to communicate scores and grades; however, ***those grades are not authoritative***. All scores (lecture and lab) will be in your LAB section. It is the student's responsibility to notify your LI or the Lab Director ASAP in the event of any mistakes in your posted score.

Please remember that (1) the course mean given on Blackboard is also NOT authoritative, and (2) that only the total number of points earned by the end of the semester determines your course grade. We will be glad to discuss your performance, and your possible grades, at any time throughout the course. Help provided in this way should be considered only provisional. Your later performance may change (sometimes dramatically) the best-meant extrapolation.

Academic Accommodations. Students requesting academic accommodations based on a disability are required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure the letter is delivered to **Dr. Chong-Cerrillo** as early in the semester as possible. DSP is open Monday-Friday, 8:30 am - 5:00 pm, GFS 120, Email: ability@usc.edu, Phone: (213) 740-0776.

The Nature of Human Health and Disease Laboratory

BISC 150Lxg

Schedule and Important Dates

Wk	Dates	Laboratory
1	Jan 19 - 20	Lab Orientation / Labster Demo Lab Safety*
2	Jan 26 - 27	Experimental Design* Light Microscopy*
3	Feb 2 - 3	Cell Structure* (quiz does not count but must be completed to 60% progress) Bacterial Cell Structure*
	<i>Fri, Feb 5</i>	<i>Last day to register and add classes</i> <i>Last day to drop a class without a mark of "W" with refund</i> <i>Last day to change enrollment option to Pass/No Pass or Audit</i>
4	Feb 9 - 10	Cellular Respiration (Principals)*
	<i>5 pm, Fri, Feb 12</i>	<i>Critical Assessment 1 due</i>
5	Feb 16 - 17	Mendelian Inheritance*
	Thur, Feb 18	Midterm 1
6	Feb 23 - 24	Human Karyotyping: A Tool for Genetic Analysis and Diagnosis [§]
	<i>5 pm, Fri, Feb 26</i>	<i>Deadline for Approval of Research Paper Topic</i>
7	Mar 2 - 3	The Biology of Skin Color [§]
	<i>Fri, Mar 5</i>	<i>Last day to drop a class without a mark of "W" on transcript</i>
8	Mar 9 - 10	Antibodies*
	<i>5 pm, Thur, Mar 11</i>	<i>Research Outline due</i>
	<i>Fri, Mar 12</i>	<i>Wellness Day</i>
9	Mar 16 - 17	The Gram Stain: Identify and Differentiate Bacteria*
	<i>5 pm, Fri, Mar 19</i>	<i>Critical Assessment 2 due</i>
10	<i>Mar 23 - 24</i>	<i>NO LAB (Tues, Mar 23 - Wellness Day)</i>
	Thur, Mar 25	Midterm 2
11	Mar 30 - 31	Your Diet and Your DNA*
	<i>9 am, Fri, Apr 2</i>	<i>Academic Dishonesty Tutorial due</i>
	<i>5 pm, Fri, Apr 2</i>	<i>Research Paper due</i>
12	<i>Apr 6 - 7</i>	<i>NO LAB (Wed, Apr 7 - Wellness Day)</i>
13	Apr 13 - 14	Control of Microbial Growth*
14	Apr 20 - 21	How Safe Are We? [§]
	<i>Thur, Apr 22</i>	<i>Wellness Day</i>
15	Apr 27 - 28	Lab Final Exam
	<i>Fri, Apr 30</i>	<i>Wellness Day</i>
	<i>Fri, Apr 30</i>	<i>Last day to drop a class with a mark of "W"</i> <i>Last day to choose a Pass/No Pass grading option</i>

*Labster