



PCB 3023L
Cell Biology Laboratory
81863 002
Fall 2026

Instructor Name*

Name: Shehan Sahibdeen

Name: Sylvie Saunders

University Course Description

Laboratory portion of Cell Biology. Metabolic processes within the cell.

Course Requisites

Prerequisite(s):

(PCB 3023 Minimum Grade: C- (may be taken during same term))

Corequisite(s):

Course Format

- PCB3023L is a 1 credit hour laboratory course. Students must have completed or be currently enrolled in the Cell Biology lecture course (PCB 3023).
- **All sections of this course meet in person, in the ISA 3043 Cell Biology lab.**
- TA/Instructor office hours will be held in BSF 221 when meeting in person or held remotely through Microsoft Teams. Your TA's/Instructor's office hours will be announced during the first week of class.

Student Learning Outcomes

- Explore examples and purposes of model systems, techniques, and equipment used in cell biology research.
- Locate and analyze scientific information through cancer research papers.
- Learn how to isolate proteins from cell lysates.
- Measure and evaluate target protein production.
- Analyze experimental results both quantitatively and qualitatively.
- Develop skills in cell staining and understand the principles of fluorescence microscopy.
- Identify potential sources of error based on experimental procedures and outcomes.
- Read, write, and present scientific findings in the format of scientific literature.
- Apply biochemical and cellular principles to conduct experiments and interpret results.
- Discuss real-world applications of laboratory techniques and analyses, such as in cancer research.

Course Objectives

- This cell biology lab course will use cancer cell lines as experimental models to explore protein receptor expression in a cell-based system. The process will involve protein quantification and analysis through a research project, allowing students to observe the effects of growth factor stimulation.
- We will review the concepts, techniques, and analyses of each experimental step, and then work together in groups to carry out the experiments.
- Our goal is to foster an inclusive and equitable learning environment that values the diversity of all classroom community members.

Required Texts and/or Readings and Course Materials

- Laboratory coat
- Safety goggles (wraparound or classic style)
- **Required Textbook: Fall 2026 Lab Manual/Notebook**, MBS Department, USF printed by Pro-Copy. ***Please have your Fall 2026 edition lab manual/notebook no later than week 2 of class, preferably by the first week.***

- Links for additional readings from the literature will also be posted on Canvas
- Computer and Internet Access
 - Links to and integration of software, videos, and tools used in the lab course will be provided through Canvas. These include, but are not limited to Excel, Labster and JoVE.

How to Succeed in this Course

- Read each assigned reading assignment and complete any pre-lab assignments before coming to class so that you will be prepared when arriving to lab each week.
- Review the previous lab exercises before class so that you will be able to make week-to-week project connections and be prepared to participate in class discussions and group activities.
- Take notes, record data in your lab Manual/Notebook, and note any updates to the procedures specific to your lab section's experiments so you have the details needed to complete your lab report and to review content for quizzes and exams.
- The lab report is a long-term assignment that you should work on week by week as you complete relevant procedures and data analyses. It is a significant grade component in this course. Work in advance of deadlines to avoid late penalties, ensure timely receipt of feedback on drafts, and make sure completion of work due at the start of class does not risk a late arrival.
- Save and backup work frequently. Please also check that you have successfully uploaded the correct file by the deadline for each assignment submission.
- Take advantage of your TA/Instructor office hours to review performance on graded assessments and ask any remaining questions you have relevant to the lab exercises.

Grading Scale

Grading Scale

Letter Grade	Range
A+	96.5 - 100
A	89.5 – 96.49
B+	86.5 – 89.49
B	79.5 – 86.49
C+	76.5 – 79.49
C	69.5 – 76.49

Letter Grade	Range
D+	66.5 – 69.49
D	59.5 – 66.49
F	0 – 59.49

Late drops, “S/U” and “I” grades will not be granted except under those circumstances specified in the USF undergraduate catalogue and College of Arts and Sciences policy. An “I” grade may only be considered under qualifying circumstances when a small portion of the student’s work is incomplete and only when the student is otherwise earning a passing grade. There is no extra credit and no curve provided in this course.

Grade Categories and Weights

Grading Categories	
<u>Component</u>	<u>Percent of Final Grade</u>
Lab Participation (10)	10%
Labster Virtual Pre-Lab Simulations (3)	6%
Activities and Skill Checks (8)	16%
Quizzes (6)	12%
Lab Manual/Notebook Check	6%
Assignments (3)	22%
Lab Report Components (3)	
Exam Assignments (2)	28%
	100%

All posted grades are final unless they are the result of a miscalculation. If a student wishes to question a grade, they are asked to first speak with the TA/Instructor within 1 week of receiving the grade. For problems/questions that cannot be resolved through the TA/Instructor, the student may then contact the course supervisor by e-mail within 2 weeks of receiving the grade. When contacting the course supervisor, please provide all pertinent information: your name, course, section, and details of the grade issue including the assignment, specific assignment question #/graded component, and rationale for the specific dispute.

Participation: Your TA/Instructor will evaluate your participation during each lab exercise. A total of 5 participation points is possible for each lab period during which you perform laboratory exercises. The average grade for all participation scores across the semester will contribute to **10% of your final grade in the course**. Factors determining participation grades include but are not limited to:

- Arriving on time
- Arriving prepared to the lab with all necessary supplies
- Proper conduct, staying on task, and keeping cell phones put away for the duration of lab
- Actively keeping record of procedures and data collection in a lab manual/notebook during lab
- Contributing fully to the work assigned and cooperation with other students and your TA
- Clean-up of your bench space and supplies

Students with an unexcused absence, as defined in the attendance policy above, will lose participation points for that day and points for any missed in-class graded component (eg. quiz, activity, manual/notebook check), in addition to a point penalty, totaling a loss of 5% of the total course grade for the first unexcused absence and 10% of the total course grade for a second or third unexcused absence.

Students with a valid excusable absence with proper notification and documentation, who are unable to make up the lab exercises, will receive a participation grade for that week equal to their average participation grade for the remainder of the semester (for up to the three-absence limit).

Labster Virtual Pre-Lab Simulations: These simulations are **individual, untimed assignments** completed through the links provided in Canvas. **You must fully complete each simulation to receive credit.** You will receive unlimited attempts and the best score will be recorded. Simulation scores are based on completion of the case/study and accuracy of answers to embedded theory questions. The experiments performed in the Labster simulations are not directly covered in the lab report for the course. These simulations will help you review background knowledge relevant to your research project in the lab, reinforce key experimental concepts, provide familiarity with several relevant hands-on techniques, and discover additional

real-world applications of the laboratory experiments performed. The average grade for the 3 simulations assigned will contribute to **6% of your final grade in the course**, 2% each.

Activities and Skill Checks: Activities and skill checks will be performed during lab to help you design experiments, perform basic techniques and calculations, read and write in the style of scientific literature, determine expected results, and analyze, interpret, and present data. In-class activities are completed **in groups** of up to 4 students. Some skill check activity components are completed **individually**. Students missing an in-class activity/skill check with an excusable, documented absence may complete a makeup assignment within 1 week of the absence, during TA office hours or on their own, depending on the activity missed. Makeup assignments may be different in style and length than the version given in class. The average grade for the 8 activities and skill checks across the semester will contribute to **16% of your final grade in the course**, 2% each.

Quizzes: Quizzes are **individual** assessments held at the start of lab that will consist of four to five questions on material you covered/experiments performed previously and the material you are assigned to read/prepare for that day's lab. Each quiz is worth a total of 10pts, including but not limited to short answer, fill-in, or multiple-choice style questions. Electronic devices, including but not limited to laptops, tablets, smart watches, and cell phones, are not permitted during in-person quizzes. Use of a non-graphing, simple or scientific calculator is permitted. Students missing a quiz for an excused, documented absence may schedule to take a makeup quiz during their TA's office hours within 1 week of the absence. Makeup quizzes may be different in question style than version given in class. The average grade for the 6 quizzes across the semester will contribute to **12% of your final grade in the course**, 2% each.

Lab Manual/Notebook: You will need a lab manual/notebook of the semester to record steps of experiments performed, data collected, and calculations and analyses. Be sure to include the date and purpose for each entry. Write as neatly as possible with sufficient details that someone not familiar with the work would need to repeat the experiment as you performed it. Keep any data

analysis that you complete outside of lab in this lab manual/notebook as well.

Any graphs that need to be properly labeled and printed will be specified during the lab. Hand-drawn graphs will not be accepted for credit.

Manual/Notebook checks are **individual assignments**. Your TA/Instructor will collect and grade your lab manual/notebook during lab. Manual/Notebooks are due at the start of each class where notebook checks are assigned. The average grade for the 3 manual/notebook checks will contribute to **6% of your final grade in the course**, 2% each.

Manual/Notebook checks are graded on completeness, accuracy, and clarity.

Lab Report Components: You will be submitting a total of three lab report assignments, all part of writing one paper across the semester in the style of a methodology primary research article to learn to present scientific data and write in the style of scientific literature in the field. Two of the three components will be short rough drafts of individual sections of the paper (an introduction draft, a partial materials & methods and results draft) to receive feedback before the final full report is due. Lab report assignments are **individual, one-time single file submission**, and will be submitted **electronically** in typed word doc format through Canvas, **Turnitin-enabled**. Lab report guidelines, specific instructions for each draft, and grading rubrics will be provided in Canvas. The average grade for all lab report assignments across the semester will contribute to **22% of your final grade in the course**. Individual drafts range from 5% each and the final full draft is worth 12% of the final course grade.

Exam Assignments: A midterm and a final exam will be given during this course. The midterm is an in-class written exam, including questions on material covered prior to the exam, and the final exam is a cumulative exam. The final exam will also be completed in the lab. Exams will include, but not be limited to, fill-in, multiple choice, short answer, and essay style questions. These are **individual** assessments completed during the lab time designated. Electronic devices, including but not limited to laptops, tablets, smart watches, and cell phones, are not permitted during in-person exams. Use of a non-graphing, simple or scientific calculator is permitted. TA/Instructors will retain all exam papers. Students are strongly encouraged to review exams with their TA/Instructor during office hours within

1 week of the grade posting to get feedback on any content missed. Students missing an in-class exam with an excused, documented absence may schedule to take a makeup exam during their TA's office hours within 1 week of the absence. Makeup exams may be different in question style and length than the version given in-class. Together, these exams will contribute to **28% of your final grade in the course**, with the midterm worth 12% and the final worth 16% of the final grade.

Course Schedule*

Cell Biology Fall 2026 Lab Schedule

Lab Day: FILL THE DAY

SCHEDULE

Week of	Exercise	What's Due
8/25 Week 1	Course Intro and Safety Guidelines Intro to Protein Signaling and Trafficking Research Project Introduction Pipetting Practice	

SCHEDULE

9/1 Week 2	Quiz #1 Protein Quantificatio n Practice Research Paper Activity (EGFR in cancer paper) Review Lab Report guidelines	Protein Synthesis Sim <i>Bring safety goggles</i>
9/8 Week 3	Quiz #2 Protein Quantificatio n Standard Curve & Calculations Activity	Plagiarism tutorial <i>Bring safety goggles</i>
9/15 Week 4	Quiz #3 Protein Quantificatio n Protein Signaling Activity	<i>Bring safety goggles</i>
9/22 Week 5	Midterm	Introduction Draft Manual/Notebook Check 1

SCHEDULE

9/29 Week 6	Intro to SDS-PAGE and Western Blot Sample Preparation and Calculation Gel Loading Skill Check Activity	SDS-PAGE Sim <i>Bring safety goggles</i>
10/6 Week 7	SDS-PAGE and Western Blot Expected Results Activity #1	<i>Bring safety goggles</i>
10/13 Week 8	Quiz #4 Western Blot Data Discussion Activity #1	Signal Transduction Sim <i>Bring safety goggles</i>
10/20 Week 9	Quiz #5 Intro to Immunofluorescence Technique Expected Results Activity #2	M&M/Results Draft Manual/Notebook 2 <i>Bring safety goggles</i>

SCHEDULE

10/27 Week 10	Quiz #6 Immunofluorescence Technique, Continued Imaging Result Analysis Data Discussion Activity #2	<i>Bring safety goggles</i>
11/3 Week 11	Final Exam	Manual/Notebook 3
11/11	<i>No labs – Veterans Day Holiday</i>	
11/17 Week 12	<i>Reserved lab week for any cancellation</i>	Final Full Lab Report
11/24	<i>No labs – Thanksgiving Holiday</i>	
12/1	<i>No labs – Test Free Week</i>	

USF Core Syllabus Policies

USF has a set of central policies related to student recording class sessions, academic integrity and grievances, student accessibility services, academic disruption, religious observances, academic continuity, food insecurity, pregnancy and related conditions, and sexual harassment that **apply to all courses at USF**. Be sure to review these online:

<https://www.usf.edu/provost/faculty-success/resources-policies-forms/core-syllabus-policy-statements.aspx>

Student Recordings

Florida Statute 1004.097 Free Expression on Campus

Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal, educational use (USF Policy 10-048). A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach enrolled students about a particular subject. Recording class activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, private conversations between students in the class or between a student and the faculty member is prohibited. Recordings may not be used as a substitute for class participation and class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the USF Student Conduct Code.

Course Policies: Grades

Attendance Policy

The following is the Department of Molecular Biosciences laboratory course attendance policy.

Lab attendance is **mandatory** and arrival to lab is expected to be **on time**. Laboratory exercises build upon each other, so missing a lab can cause learning gaps and students to fall behind. Students who miss a laboratory without a documented, valid excuse will lose **5% of the possible total score for the first occurrence and 10% of the possible total score for each subsequent occurrence**. Due to the hands-on nature of laboratory courses, more than 3 absences, whether excused or unexcused, result in a failing grade (F) for this course. If you find that you are absent for several classes due to illness or other circumstances, it is recommended that you reach out to the lab supervisor, and determine if dropping the

class should be considered. Absences will be excused for documented, legitimate reasons according to university guidelines (unforeseen: e.g. medical emergency, death in the immediate family; and special circumstances: e.g. jury duty, day of religious observance, USF-sponsored academic conference participation). Documentation may be a medical doctor's note, hospital admission papers, legal or a funeral notice that documents the specific date & time of the missed lab period including the student's name. Lab absences due to work obligations or inclement weather, unless classes are canceled as a result of university closure, do not represent excusable circumstances.

Please notify the TA/Instructor **at the beginning of the semester (by the second week of class) for foreseen excusable absences** (special circumstances) and **within 48 hours of the missed lab period for unforeseen excusable absences** to make arrangements for turning in any in-person assignments due/completed during the missed lab period. The proper supporting **documentation** for an excused absence should be presented to the TA/instructor **within one week** of the absence. Where possible, you may only attend a different lab section **with the specific direction** from the lab supervisor or TA/Instructor. Laboratories cannot be made up beyond the week that a particular lab is scheduled, and it is not guaranteed that there will be space available to schedule attendance in another lab section. Only documented, excused absences are considered for rescheduling.

Students who anticipate the necessity of being absent from class due to a major religious observance are asked to provide notice of the date(s) to their TA/Instructor, in writing, by the second week of classes. If an exact date for a major religious observance is not known in advance, the student should instead provide notice of the anticipated week of the religious observance by the second week of classes.

Late arrival or early departure is disruptive to the class, group work, and can often result in students missing important safety information and assignments. **Late arrival up to 15 minutes** after the lab start time is permitted, but will count against the student's participation points. If

quizzes are given at the beginning of class, late arrivals will be given any remaining time to complete the quiz. If students arrive after or as quizzes are being collected, the student will receive a 0 for that quiz. **Students leaving early, within 15 minutes of completion of lab activities** will lose participation points for that day.

Please do not come to class if you are more than 15 minutes late.
This will count as an unexcused absence because it is disruptive to your TA/Instructor and classmates to arrive during lab activities and too much will have been missed to easily catch up. If you encounter an unforeseen circumstance and are going to be late, please notify the TA/Instructor as soon as possible. **You unfortunately will not be permitted to stay** unless you have obtained prior permission from your TA/Instructor for an excusable, documented circumstance. **Students leaving more than 15 minutes prior to completion of the lab activities** without prior permission for an excusable, documented circumstance will also receive the point penalty for an unexcused absence due to too much work being missed.

Submitting Assignments and Late Work Policy

Quizzes, activities, and written exams are completed in-class during the time designated. Labster pre-lab simulations, manual/notebook checks, and lab report assignments are due by the **start of class time** during the weeks designated, unless specified otherwise.

While extensions are not provided on long-term assignments without documentation (e.g. lab report), late submission of simulations, and lab report assignments is permitted, albeit at a **10% per day late penalty** based on the total point value of the assignment (10% if submitted during the first 24hr after the deadline, 20% if submitted 24-48hr after the deadline, etc.). A late penalty exceeding the score earned will result in a zero on the assignment.

If you experience any difficulty loading a Labster simulation:

- Give it time, some simulations take ~10min to open

- Check that you are using Chrome or Firefox
- Close any other programs/browsers running on your computer
- Clear cache and cookies

Please reach out promptly to your TA/Instructor with a screen shot of the error and contact Labster support in advance of the assignment deadline for further help if these above troubleshooting efforts don't resolve the issue.

If you encounter a technical issue submitting a lab report word doc file through Canvas, please email the file to your TA/Instructor to note the time of completion, reach out to the IT help desk (<https://www.usf.edu/it/services/client-support>) to resolve the Canvas issue so that you can submit your work through Turnitin, and provide your TA/Instructor with the IT ticket number. It is helpful to screen shot and send images of errors received to help troubleshoot issues encountered. For this reason, please do not wait until the last minute to submit work so that you do not risk incurring a late penalty. Any file submitted by email before the deadline will only be graded without late penalty if it is the same file uploaded through Canvas to Turnitin once the technical issue is resolved.

Academic Integrity

Academic integrity is the foundation of the University of South Florida's commitment to the academic honesty and personal integrity of its university community. Academic integrity is grounded in certain fundamental values, which include honesty, respect, and fairness. Broadly defined, academic honesty is the completion of all academic endeavors and claims of scholarly knowledge as representative of one's own efforts. The process for faculty reporting of academic misconduct, as well as the student's options for appeal, are outlined in detail in [USF Regulation 3.027](#). Actions that are considered Violations of academic integrity include, but are not limited to:

1. **Cheating:** Using or attempting to use materials, information, notes, study aids, or other assistance in any type of examination or evaluation which have not been authorized by the instructor.
2. **Plagiarism:** Intentionally or carelessly presenting the work of another as one's own.
3. **Fabrication, Forgery and Obstruction:**
 - a. **Fabrication:** The use of invented, counterfeited, altered, or forged information in assignments of any type including those activities done in conjunction with academic courses that require Students to be involved in out-of-classroom experiences.
 - b. **Forgery:** The imitating or counterfeiting of images, documents, signatures, and the like.
 - c. **Obstruction:** Any behavior that limits the academic opportunities of other Students by improperly impeding their work or their access to educational resources.
4. **Multiple Submissions:** The presenting or turning in the same or substantially the same work for credit in two or more courses. Multiple Submissions shall include the use of any prior academic effort previously submitted for academic credit at this or a different institution.
5. **Complicity:** Assisting or attempting to assist another person in any act of Academic Dishonesty, even when the intention is not dishonest.
6. **Improper Use of Teamwork Credit:** Allowing your name to be included on a group project in which you did not participate.
7. **Solicitation or Purchase:** The offering, advertising, or responding to solicitations or purchasing products or services designed to facilitate, support, or actively contribute to the commission of an act of Academic Dishonesty.
8. **Digital Repositories of Class Materials, Including Notes, Quizzes, and Tests:** Either accessing (including downloading) or sharing (including uploading) proprietary notes, quizzes, and tests from USF classes, even when the intent is not to enhance one's personal grade.
9. **Misrepresentation:** Submitting the work of another as your own, e.g., using a ghostwriter to write a paper, thesis, dissertation; having another person complete an on-line class in your name.
10. **Misconduct in Research and Creative Endeavors:** A serious deviation from the accepted academic and professional practices within a discipline or from the policies of the university in carrying out, reporting, or exhibiting the results of research or in publishing, exhibiting, or performing creative endeavors.
11. **Computer Misuse:** Includes unethical or illegal use of the computers and/or Internet of any person, institution, or agency in which Students are performing part of their academic program.
12. **Misuse of Intellectual Property:** The illegal use of copyright materials, trademarks, trade secrets or intellectual properties.

13. **Violation of State or Federal laws with regard to Intellectual Property:** Conduct that violates and does not adhere to state or federal laws concerning the fair use of copies or other intellectual property.

Severity of Academic Integrity for Undergraduate Students

For Undergraduate Students, the severity of conduct is divided into levels with specific academic related sanctions. These levels One through Four are outlined in the [Academic Integrity Policy USF Regulation 3.027](#). Depending on the severity of a violation and the importance of the relevant assignment(s) toward your overall grade, possible penalties include the early termination of your exam or quiz, a grade of zero or a reduction of your grade on an assignment, an 'F' for the course, or an 'FF' for the course (failure for academic dishonesty). Although a first offense may not result in an 'FF', a second offense is guaranteed to. This includes the potential case in which a student plagiarizes but by chance is not caught initially, then commits a second offense which is caught and leads to the discovery of the first offense. Ignorance of the rules will not absolve or reduce consequences.

The final decision on an academic integrity violation and related academic sanction at any USF System institution shall affect and be applied to the academic status of the student throughout the USF System, unless otherwise determined by the independently accredited institution. Appeals may be made within 14 days of the notice of disciplinary action, and only to the Undergraduate Director of the department.

Guidelines to Avoid Academic Integrity Violations in this Course—Written Works:

- Lab exercises may be performed individually, in pairs, or in larger groups of students. Sharing data with a partner, comparing results with others, and discussing conclusions is permitted and even encouraged. However, students must complete class exams, quizzes, abstracts and lab reports individually. Copying and/or verifying answers from another student's quiz or exam are prohibited. Likewise, permitting another student to view your quiz or exam answers is prohibited. If you suspect that your work has been copied, notify your TA immediately.

- Abstracts or **lab reports must be written individually by each student.**

Students may not show their work to another student, accept another student's work for review, work together on an abstract or lab report, copy the words of another student or modify another student's work, irrespective of whether the student is in the same section, in a different section, or is a former student. Assisting a student by sharing your own work, either in the current semester or at a future time, constitutes academic dishonesty. This applies to the entire abstract, all sections of the lab report (abstract, introduction, methods, results, discussion, and references) and to the creation of all figures, graphs and tables.

- **Students who are retaking the lab course may not submit the abstract, lab report or lab manual/notebook exercises that they submitted previously in the prior course. Submitting the same work or major portions thereof to satisfy the requirements of more than one course without permission from the instructor constitutes a Level Two academic integrity violation.** Graphs and tables must be new, containing the data obtained in the current semester. The Results section must likewise describe the current set of data. The Discussion section must support the current data and should contain any new conclusions or observations. Students should follow the assignment guidelines when writing the Introduction. The Methods section should describe precisely what was done in the current exercise. **Students will not receive credit for work showing a high degree of similarity to work submitted in a previous semester.**

- Writing assignments over topics unfamiliar to you requires library research. **Do not use direct quotes. When using the published thoughts and ideas of another in your paper, it is essential that the words be paraphrased, or rewritten in your own words, AND the source be cited. Do not cut and paste!** Passages that have been cut and pasted, then re-worded, are rarely sufficiently paraphrased. **Plagiarism, or using another's words or ideas without crediting the source, is a form of academic dishonesty.** Students may not plagiarize a published source or posting on the Web. This applies to the entire abstract and all sections of the lab report (abstract, introduction, methods, results, discussion, and references).

Guidelines to Avoid Academic Integrity Violations in this Course— Exams:

- Students are responsible for following all the instructions provided to you for an exam. Failure to follow those instructions may constitute academic misconduct or cause you to lose points on the exam.
- In the case of university emergency conditions forcing an exam to be online, you may be required to complete an exam or quiz with online proctoring. Students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence. Students must ensure that any recordings do not invade any third-party privacy rights and accept all responsibility and liability for violations of any third-party privacy concerns.
- Using prohibited materials (those not approved by the instructor --e.g., books, notes, electronic devices, online resources, or calculators) during an examination constitutes a Level Three violation.

Plagiarism Check Notification: In this course, **turnitin.com will be utilized**. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you will be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, as instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit <http://www.turnitin.com>. Essays are due at turnitin.com the same day as in class.

Conduct in the course

Disruptive students in the academic setting hinder the educational process. Disruption of the academic process (USF Regulation 3.025) is defined as the act, words, or general conduct of a student in a classroom or other academic environment which in the reasonable estimation of the instructor: (a) directs attention away from the academic matters at hand,

such as noisy distractions, persistent, disrespectful or abusive interruption of lecture, exam, academic discussion, or general University operations, or (b) presents a danger to the health, safety, or well-being of self or other persons. The student will first receive a warning from the TA/Instructor. If the conduct is serious enough that the TA/Instructor feels the behavior endangers themselves and/or other students present, the TA/Instructor will have the right to ask the student to leave the lab, which will be considered an unexcused absence and could lead to dismissal from the course. Please refer to the following website for university policies regarding conduct and disruption of the academic process: <http://regulationspolicies.usf.edu/> .

General Conduct and Communication Guidelines

- Act professionally in the way you communicate. Treat your instructors, TAs, and peers with respect. Respect other people's ideas and be constructive when explaining your views about points you may not agree with.
- Be sensitive. Be respectful and sensitive when sharing your ideas and opinions. There will be people in your class with different linguistic backgrounds, political and religious beliefs, and/or other cultural differences.
- Proofread and check spelling. Doing this before sending an email will allow you to make sure your message is clear and thoughtful.
- Keep your emails and postings related to the course content. You should not post anything personal on a discussion board, unless requested by the TA/Instructor.
- Any personal, course or confidential issues should be directly communicated to the TA/Instructor/Lab supervisor via email.
- When sending emails to your TA/Instructor/Lab supervisor, please include your course and section number.

Laboratory Safety

Some of the reagents that are used in the lab are hazardous. Please follow all procedural and waste disposal instructions carefully. Those students who do not follow safety rules endanger themselves and their fellow students. Violations of safety rules can result in dismissal from the lab. If you are asked to leave, you will not receive credit for that day's

session. Closed-toe shoes must be worn in the laboratory and feet and legs must be entirely covered. **No open-toed or open back shoes or sandals are permitted. Shorts and short skirts are not allowed.** Students should wear long pants or jeans, which provide better protection for the legs in case of a spill. Gloves must be worn at all times unless noted by the TA/Instructor. You must wear a lab coat at all times and safety goggles to protect yourself when working with corrosive or toxic chemicals and when there is any risk of splash or objects impacting the eye. No eating, drinking, or smoking is permitted in the lab at any time. No friends or children are permitted in the lab. Wash your hands after lab to prevent carrying any contamination home with you. If a student has any kind of mishap in the lab, an accident or near miss, the student is to immediately inform the TA/Instructor.

Laptop Usage

Laptop and tablet usage is not permitted at the lab bench during hands-on wet lab experiments due to risk of contamination with laboratory reagents. Student groups will have lab computers available for any computer-based, in-class data analysis.

Lecture/Lab drop policy

When taken together with the Cell Biology lecture (PCB 3023), the lecture serves as a co-requisite for the lab. Withdrawal from the lecture component will therefore automatically drop you from the lab as well. However, a student may petition to withdraw from the lecture and remain in the lab. BioAdvise provides a petition form for this purpose (<https://secure.cas.usf.edu/depts/bio/bioadvise/forms/co-req-petition.aspx>). Once the form has been submitted and the permit has been issued, it is the student's responsibility to process the drop online before the withdrawal deadline. **Please be sure the proper permit is in place prior to dropping the lecture if you wish to stay in the lab.** Students may withdraw from the PCB 3023 lab and remain in the PCB 3023 lecture without need for a permit. Please email bioadvise@usf.edu if you are

receiving an error that states you must drop both before proceeding with the drop.

Academic Accommodations

Students in need of academic accommodations may consult with the office of Students Accessibilities Services to arrange appropriate accommodations: www.usf.edu/SAS. SAS encourages students to notify instructors of accommodation needs at least five (5) business days prior to needing the accommodation. A letter from SAS must accompany this request. Please reach out to **the lab course supervisor** for all accommodation requests.

If any incidents occur or medical conditions arise during the semester that necessitate special accommodations, please notify the instructor within 48 hours of the events, along with official paperwork provided by professionals. **SAS accommodations are not retroactive and will only apply from the date the accommodation letter is generated and received.**

Academic Support and Wellness Services

The USF Office of Student Success coordinates and promotes university-wide efforts to enhance undergraduate and graduate student success. For a comprehensive list of academic support and wellness services available to all USF students, please visit the Office of Student Success website: <http://www.usf.edu/student-success/> and the Student Affairs Wellness website: <https://www.usf.edu/student-affairs/departments/wellness.aspx>.

COVID-19 Policies

For the most recent communication regarding COVID-19 protocols, please visit:

<https://www.usf.edu/coronavirus/>. Students should not attend class if they are ill, particularly if they have fever and/or gastrointestinal symptoms and/or respiratory symptoms such as a sneezing, runny nose, sore throat

or coughing. Students experiencing any of these symptoms should contact Student Health Services immediately (813-974-2331) for appropriate medical guidance and to obtain a *verification of care letter*.

Additional University Deadlines, Policies, and Procedures:

Withdrawal Deadline for the Fall 2026 semester: Oct 31st, 2026

Policies about disability access, religious observances, academic grievances, academic integrity and misconduct, academic continuity, food insecurity, and sexual harassment are governed by a central set of policies that apply to all classes at USF. These may be accessed at: <https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx>

It is the student's responsibility to be aware of their academic standing and grade status. In an attempt to assist the student in evaluating his/her academic status mid-term, instructors will submit midterm grades electronically for each student.

All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued. The results of student feedback are sent to departments and faculty members after semester grades are already submitted, and student responses are reported only anonymously and in the aggregate to faculty.

USF considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. USF expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. Dimensions of diversity can include sex, race, age, national origin, ethnicity, gender identity and expression, intellectual and

physical ability, sexual orientation, income, faith and non-faith perspectives, socio-economic class, political ideology, education, primary language, family status, military experience, cognitive style, and communication style. The individual intersection of these experiences and characteristics must be valued in our community. Our goal is to help you be successful in a classroom where everyone feels safe and welcome.

USF is committed to providing an environment free from sex discrimination, including sexual harassment and sexual violence (USF Policy 0-004). The USF Center for Victim Advocacy is a confidential resource where you can talk about incidents of sexual harassment and gender-based crimes including sexual assault, stalking, and domestic/relationship violence. This confidential resource can help you without having to report your situation to the Title IX Office unless you request that they make a report. Contact the USF Center for Victim Advocacy: 813-974-5757, <https://www.usf.edu/student-affairs/victim-advocacy/>. Please be aware that in compliance with Title IX and under the USF Policy, educators must report incidents of sexual harassment and gender-based crimes including sexual assault, stalking, and domestic/relationship violence. **If you disclose any of these situations personally to an educator, they are required to report it to the Title IX Office.** For more information about Title IX, a full list of resources, or to report incidents of sexual harassment, sexual violence, relationship violence or stalking visit: www.usf.edu/title-ix/.

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Skype, and email messaging and/or an alternate schedule. **It's the responsibility of the student to monitor the Canvas course website for each class for course specific communication**, and the main USF, College, and department websites, emails, and MoBull messages for important general information. For additional guidance on emergency protective actions and hazards that affect the University, please visit www.usf.edu/em

Finally, please note that we reserve the right to make changes to this syllabus, with notification to the students, during the course of the semester as situations may be dictated.

Grades of "Incomplete"

The current university policy concerning incomplete grades will be followed in this course.

For undergraduate courses: An “I” grade may be awarded to a student only when a small portion of the student’s work is incomplete and only when the student is otherwise earning a passing grade. The time limit for removing the “I” is to be set by the instructor of the course. For undergraduate students, this time limit may not exceed two academic semesters, whether or not the student is in residence, and/or graduation, whichever comes first. For graduate students, this time limit may not exceed one academic semester. “I” grades not removed by the end of the time limit will be changed to “IF” or “IU,” whichever is appropriate.

Campus Free Expression

It is fundamental to the University of South Florida’s mission to support an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive.

In the instructional setting, ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. “Objective” means that the idea(s) presented can be tested by critical peer review and rigorous debate, and that the idea(s) is supported by credible research.

In this course you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding and engaging with an idea does not require you to believe it or to agree with it.

Course Policies: Technology and Media

Online Exam Proctoring: All students must review the syllabus and the requirements, including the online terms and video testing requirements, to determine if they wish to remain in the course. Enrollment in the course

is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period. In rare circumstances where this lab must continue online, online exams and quizzes within this course may require online proctoring. Therefore, students will be required to have an operational webcam with a microphone when taking an exam or quiz. Depending on the test requirements, a side-view camera may be required. This setup will require the use of a separate USB webcam. Students understand that remote recording devices are purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing, and present, in the residence at the time of testing. Students should use a private testing space that meets the instructor's specified test-setting requirements, as needed to eliminate any consent and privacy concerns. Students with concerns may discuss the location of an appropriate space for the recordings with their instructor or advisor. Students must ensure that any recordings do not invade any third-party privacy rights and accept all responsibility and liability for violations of any third-party privacy concerns. Students are fully responsible for ensuring all technological requirements necessary to take an online proctored exam, including, but not limited to, a reliable computer, a functional camera with a microphone (USB or internal, depending on test requirements), a high-speed internet connection, and up-to-date software, including the latest versions of Chrome browser and the Honorlock Chrome extension are available. Depending on the exam, students may also need to download the Honorlock app. Setup information will be provided prior to taking the online proctored exam. For additional information, please visit the USF online proctoring student FAQ and Honorlock student resources.

Personal Devices: The use of cell phones, laptops, headphones, smart watches, etc. is prohibited in the laboratory unless expressly permitted by the instructor and lab coordinator. If you are permitted to use a personal device with explicit permission from your instructor, you must remove your gloves when using it and clean it before leaving the lab to avoid contamination. If you bring a phone or other personal device to the lab for an exam, make sure it is turned off and stowed before class begins.

Violation may result in a reduced participation score or dismissal from the lab and constitutes a level three academic integrity violation on exams.

Course Policies: Student Expectations

Health and Wellness

Your health is a priority at the University of South Florida. We encourage members of our community to look out for each other and to reach out for help if someone is in need. If you or someone you know is in distress, please make a referral at www.usf.edu/sos so that the Student Outreach & Support can contact and provide helpful resources to the student in distress. A 24-hour licensed mental healthcare professional, offered through the counseling center, is available by phone at 813-974-2831, option 3. Please remember that asking for help is a sign of strength. In case of emergency, please dial 9-1-1.

Title IX Policy

USF is committed to fostering a safe and respectful learning environment, free from sex discrimination and sexual harassment, in accordance with Title IX and USF Policy 0-004. If a student shares an experience of sexual harassment, sexual assault, stalking, or relationship violence with a USF employee (including faculty), that employee will notify the Title IX Office. This allows the Title IX Office to send the student an email with information about support resources and options—if it is safe to do so. Students are not required to respond to this email. The Title IX Office is a private resource. Information is shared only on a need-to-know basis to provide students with support measures. To speak to a confidential resource, students may contact USF Center for Victim Advocacy at 813-974-5757. Confidential resources do not notify the Title IX Office unless the student requests it. For more information about Title IX, available resources, or to make a report, please visit www.usf.edu/title-ix.

Course Hero / Chegg Policy

The USF Policy on Academic Integrity specifies that students may not use websites that enable cheating, such as by uploading or downloading material for this purpose. This does apply specifically to Chegg.com and CourseHero.com – almost any use of these websites (including uploading proprietary materials) constitutes a violation of the academic integrity policy.

Professionalism Policy

Per university policy and classroom etiquette; mobile phones, iPods, etc. must be silenced during all classroom and lab lectures. Those not heeding this rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, etc., and have been warned may suffer a reduction in their final class grade.

Turnitin.com

In this course, turnitin.com may be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you may be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, as instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit <http://www.turnitin.com>.

Netiquette Guidelines

- Act professionally in the way you communicate. Treat your instructors and peers with respect, the same way you would do in a face-to-face environment. Respect other people's ideas and be constructive when explaining your views about points you may not agree with.

- Be sensitive. Be respectful and sensitive when sharing your ideas and opinions. There will be people in your class with different linguistic backgrounds, political and religious beliefs or other general differences.
- Proofread and check spelling. Doing this before sending an email or posting a thread on a discussion board will allow you to make sure your message is clear and thoughtful. Avoid the use of all capital letters, it can be perceived as if you are shouting, and it is more difficult to read.
- Keep your communications focused and stay on topic. Complete your ideas before changing the subject. By keeping the message on focus you allow the readers to easily get your idea or answers they are looking for.
- Be clear with your message. Avoid using humor or sarcasm. Since people can't see your expressions or hear your tone of voice, meaning can be misinterpreted.

Email and Discussion Board Guidelines

- Use the subject line effectively by using a meaningful line of what your email or discussion is about.
- Keep your emails and postings related to the course content. You should not post anything personal on a discussion board unless it is requested by the instructor.
- Any personal, course or confidential issues should be directly communicated to the instructor via email. The discussion boards are public spaces; therefore, any issues should not be posted there.

End of Semester Student Evaluations

All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued.

Food and Drink Policy (for in-campus sessions only).

Please adhere to the firm policy of no beverages (other than bottled/capped water), food, tobacco products, or like items in the classroom. Your understanding of the necessity for this policy and cooperation will be greatly appreciated. This policy will be strictly enforced.

Learning Support and Campus Offices

Academic Accommodations

Students with disabilities are responsible for registering with Student Accessibility Services (SAS) in order to receive academic accommodations. For additional information about academic accommodations and resources, you can visit the SAS website.

[SAS website for the Tampa campus and Sarasota-Manatee Teachout site.](#)
[SAS website for the St. Pete campus.](#)

Academic Support Services

The USF Office of Student Success coordinates and promotes university-wide efforts to enhance undergraduate and graduate student success. For a comprehensive list of academic support services available to all USF students, please visit the [Office of Student Success website](#).

Canvas Technical Support

If you have technical difficulties in Canvas, you can find access to the Canvas guides and video resources in the “Canvas Help” page on the homepage of your Canvas course. You can also contact the help desk by calling 813-974-1222 in Tampa or emailing help@usf.edu.

[USF IT Services](#)

Center for Victim Advocacy

The [Center for Victim Advocacy](#) empowers survivors of crime, violence, or abuse by promoting the restoration of decision making, by advocating for their rights, and by offering support and resources. Contact information is available online.

Counseling Center

The Counseling Center promotes the wellbeing of the campus community by providing culturally sensitive counseling, consultation, prevention, and

training that enhances student academic and personal success. Contact information is available online.

[Counseling Center website for the Tampa campus and Sarasota-Manatee Teachout site.](#)

[Counseling Center website for the St. Pete campus.](#)

Tutoring

The Tutoring Hub offers free tutoring in several subjects to USF undergraduates. Appointments are recommended, but not required. For more information, email

asctampa@usf.edu.

[Tutoring website for the Tampa campus and Sarasota-Manatee Teachout site.](#)

[Tutoring website for the St. Pete campus.](#)

Writing Studio

The Writing Studio is a free resource for USF undergraduate and graduate students. At the Writing Studio, a trained writing consultant will work individually with you, at any point in the writing process from brainstorming to editing. Appointments are recommended, but not required. For more information or to make an appointment, email: writingstudio@usf.edu.

[Writing studio website for the Tampa campus and Sarasota-Manatee Teachout Site.](#)

[Writing studio website for the St. Pete campus.](#)

Student Ombuds Office

Florida Statute 1006.51 and Florida Board of Governors Regulation 6.011 require that all public institutions provide ombuds services to students. The Student Ombuds Office at USF is a confidential, impartial, informal, and independent resource for students experiencing challenges related to the university. Ombuds can help students safely explore options, clarify

processes, and consider next steps. [Learn more or make an appointment at usf.edu/student-ombuds.](https://usf.edu/student-ombuds)