## **BIOSC 1855: INTRODUCTION TO MICROBIOLOGY LAB**

Department of Biological Sciences, University of Pittsburgh

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	Email is the best way to contact instructors. Emails will be read between 9 am and 9 pm, and are typically replied to within 24 hours of reading.				
Class Meetings	Labs with <b>Ruth Orr</b> are in <b>G04 Clapp</b> .		Labs with Kim Payne are in G05 Clapp.		
	• TuTh 9:00-10:50a (TR900)		• MoWe 12:30-2:20p (MW1230)		
	• TuTh 11:00a-12:50p (TR1100)		<ul> <li>MoWe 2:30-4:20p (MW230)</li> </ul>		
	• TuTh 1:00-2:50p (TR100)		• TuTh 3:30-5:20p (TR330)		
Office Hours	Remote using Zoom				
	Ruth Orr – Wednesday 10 am to 12 pm				
	Kim Payne – Thursday 2 pm to 3 pm				
Statement	During this pandemic, it is extremely important that you abide by the <u>public health regulations</u> , the University of Pittsburgh's <u>health standards and guidelines</u> , and <u>Pitt's Health Rules</u> . These rules have been developed to protect the health and safety of all of us. Universal <u>face covering</u> is required in a classrooms and in every building on campus, without exceptions, regardless of vaccination status. The means you must wear a face covering that properly covers your nose and mouth when you are in the classroom. If you do not comply, you will be asked to leave class. If you are denied access to Clapp and the Clapp classrooms because of not wearing a mask, your absence will count as an unexcuse absence. It is your responsibility have the required face covering when entering a university building of classroom. For the most up-to-date information and guidance, please visit <u>coronavirus.pitt.edu</u> and check your Pitt email for updates before each class.				
	If you are required to isolate or quarantine, become sick, or are unable to come to class, contact me as soon as possible to discuss arrangements.				
	We all thrive when our environment is happy, comfortable, and supportive. If you are struggling or have extenuating circumstances affecting your ability to perform at any point in this course, please tell us ASAP. Similarly, we ask for your understanding of our own challenges during this time that may result in sudden changes to the course. We are committed to providing you with the best experience possible given our current ever-changing circumstances, and we will never move up a deadline or introduce a new graded assignment without at least one week's notice.				
Late Add Policy	Since experimentation and other class activities start on the first day of class, if you add the class during the Add/Drop period, you will have missed important course work. Be aware that you are responsible for catching up and completing any missed work. The deadlines for any project-associated work and submissions will not be extended. There are no opportunities for make-up lab time or missed assessments. Your instructor will be as accommodating as possible to meet with you outside of your normal class time; this arrangement must be initiated by you.				

## **Course Description and Tools**

## Introduction This is a 1 credit survey course in laboratory microbiology, intended for students who would like to learn about the subject but do not plan to major in microbiology. Pre-requisites are two semesters of introductory biology laboratory courses and co- (or pre-) requisite is a lecture course in general microbiology (BIOSC1850). Students in this course will culture microorganisms from natural sources such as soil, vegetables, and Course Description skin, and learn various methods while studying the organisms. The coursework includes: Isolation and cultivation of various bacteria types from natural sources Types of methods used to culture and study these microorganisms including aseptic technique; composition of microbiological culture media; use of microscopes and basic staining techniques; identification of unknown bacterial isolates and some practical applications of microbiology such as identification of clinical isolates Practice with data analysis and safety practices for protecting the microbiologist, other personnel, and the workspace from microbial contamination. The curriculum includes a variety of standard methods that anyone having such a course listed on his or her transcript would be expected to know. **Course Goals** A student who successfully completes this course should be able to: Technical Goals: Perform standard lab techniques to culture, count, and characterize microbes. Use lab protocols typical in this field. Protect their own and others' safety while working with microbes and lab materials. Knowledge Goals: Use basic technical language correctly. List some commonly found microbes by name and give simple descriptions. Reasoning Goals: Decide which of similar methods might be best to use in specific circumstances. Develop skills in data analysis. **Course Tools** Canvas, canvas.pitt.edu, will be used for course and class announcements, posted lectures and links, Pre-Labs and other assignments, and other additional material as needed. You are expected to check Canvas daily, or at minimum receive all announcements sent via Canvas. Panopto is used for asynchronous course content like demo and lecture videos. • Gradescope will be used for Assignment and Quiz submissions, and to provide feedback on responses. This will be linked through Canvas but will also send links to your Pitt email address. Top Hat will be used for real time assessment of student understanding. PDF forms will be used for both Assignments and Quizzes. These can be filled out with various free

programs such as Adobe Reader or Mac's Preview. Be sure to download the forms and open in one

If you need help with Canvas, use the "Help" section within Canvas, or for other issues please contact

of these programs (NOT in your browser) and verify that the information is saved.

the computer help desk at 412-624-HELP or helpdesk@pitt.edu.

## **Evaluation, Grading, Accommodations, and Absences**

## Student Evaluation

- **Pre-Lab Assignments:** These will be submitted weekly through Canvas and are due by noon on Monday (or Wednesday for sessions 1.2 and 2.2). These will include points for watching the assigned recorded lectures through Panopto. The lowest two Pre-Lab scores are dropped. Pre-Labs are NEVER accepted late, regardless of circumstances.
- Quizzes: There will be five quizzes conducted in class. Point values with vary, and the lowest 10 points will be dropped (details in the section about Accommodations).
- **Practicals**: There will be hands-on laboratory practical exams for each Project. Detailed rubrics will be available in advance. Point values with vary, and the lowest 5 points will be dropped.
- **Assignments:** There will be five assignments in which you may submit samples, experimental results, and analyses of experiments performed in class. These will be submitted as pdf forms.
- Participation: There will be 50 participation points adjusted to be worth 5% of your final grade. Each class session can earn two points; one from attendance (in-person only) and one from participating with Top Hat and asking/answering questions (possible remotely). More than 50 points are available to earn, permitting some to be missed without impacting your grade.
- Professionalism Points: The behaviors that you learn and practice in this class (e.g. preparation, etiquette, cleanliness, and safety) will be carried forward into your professional life and so they will also be part of your learning and evaluation. Issues will be documented and, after three warning points, will result in deductions from your 10 professionalism points, which account for 5% of your grade.
- Lab Notebook: You will keep a 3-ring binder lab notebook that you will be able to use for notes, quizzes, and assignments. You may take your notebook home after disinfection with ethanol, but you must have it during every class (forgetting it may subtract from your professionalism points). It is not graded, although we may periodically check for completion.

### Course Grade

The grade will be approximately as follows (and adjusted with notice as needed):

Assessment	Points	Approx. % of grade	Built-in accommodations or flexibility
Pre-Labs (15)	TBD, adjusted to 50	25%	Two lowest scores dropped
Quizzes (5)	50	25%	#/10 points of lowest score dropped
Assignments (5)	50	25%	2 grace days provided, then -10% per day late
Practicals (3)	30	15%	#/5 points of lowest score dropped
Participation	50, adjusted to 10	5%	Up to 54 points but only 50 needed
Professionalism	10	5%	3 warning points
Total	200	100%	

Historically, final grades fall on the following grading scale. HOWEVER, final grades are NOT constricted to these requirements. Your final grade is at your instructor's discretion.

Grade	Range of Scores						
	Scores		Scores		Scores		
A+	98-100	B+	88-89	C+	78-79	D	60-69
Α	94-97	В	84-87	С	74-77	F	<60
A-	90-93	B-	80-83	C-	70-73		

## **Accommodations** and Flexibility

We understand this is a difficult time that warrants additional flexibility, and so have the following accommodations for your assessments:

- For Pre-Labs, the lowest two scores will be dropped (out of 13 total PLs). Absolutely NO Pre-Lab assignments will be accepted late (don't ask for an extension; just let it be one that you drop!).
- For Assignments, you will have two grace days to spend during the semester, allowing you to submit assignments up to 2 days late with no penalty. Afterwards, late submissions will be assessed a 10% penalty per date, i.e., a late but perfect submission 5 days after the deadline can earn only half the maximum points (assuming no grace days were used). If it is later than 5 days, no credit will be awarded. Grace days will automatically be applied.
- Quizzes and Practicals vary in point totals from 5 to 20 points, and so we cannot fairly allow different assessments to be dropped. Instead, each student will be able to drop their lowest "10 point" portion for quizzes and "5 point" portion for practicals. An example of the math for this is available on Canvas.
- For Participation, there are 50 points to be earned and up to two points can be earned in each session, so full points can be earned in 25 out of the total 27 class sessions. This allows some "wiggle room" for if you miss a class or have to be remote and can only earn half of the participation points for a session.
- For **Professionalism points**, there are 3 warning points before any deductions from the 10 points.

## Contesting a Grade

If you wish to contest a grade for any material that is evaluated in this course, you may do so by submitting your request in writing and explaining why you think the grading was in error within one week from the return of the materials. Please be aware that the entire document may be re-graded.

#### **Absences**

 Any absence must be properly excused by a healthcare provider OR Pitt Student Health for an illness or a University official for University business. Excused absences are at the discretion of your instructor, although most absences may count as excused if you keep in regular communication with your instructor and demonstrate a reasonable effort to make progress in the course. Acceptable documentation should be submitted to your instructor via email within one week of the missed class or it may not be accepted. The penalties for unexcused absences are:

1 unexcused absence	No additional penalty
2 unexcused absences	Deduction of ½ letter grade from final grade
3-4 unexcused absences	Deduction of one full letter grade from final grade
5+ unexcused absences	Failure for class (if withdrawal option or G grade not taken)

- If you aren't certain whether your reason for an absence will meet our guidelines, please ask! We try to be as accommodating as we can while still being fair, but communication is key.
- As soon as you are aware of an upcoming absence or know you will be late for a class, please contact the instructor via email. If it is less than 1 hour before class, please email the TA(s) in addition to the instructor. If you miss a class because of an emergency, please let us know as soon as you can. Please call (or ask someone else to call) or send an email to your instructor. The preferable contact method is by email.
- Missing class will also result in missing the opportunity for that day's participation points. However, if you have an excused absence but can attend the class remotely through Zoom, you may still earn up to half of the participation points, for example by answering Top Hat questions.
- Any need for absence from a guiz or request for extra time on an assignment must be documented in writing by email. If you miss an exam or quiz and are permitted to take a makeup, the makeup may not be of the same kind as the exam or quiz taken by the class. For example, it could be composed of essay questions or be an oral exam.
- If you arrive late to an in-person lab session, you will be allowed to participate only at the discretion of the instructor. If your tardiness results in a safety concern and/or an undue instructional burden, you will not be allowed to attend class on that day. In such a case, it will be your responsibility to arrange for a time to make up the work, if that is possible.

## **Additional Information and Statements**

Plagiarism and Academic Integrity Cheating/plagiarism will not be tolerated. Students in this course will be expected to comply with the <u>University of Pittsburgh's Policy on Academic Integrity</u>. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam. A minimum sanction of a zero score will be imposed.

To learn more about Academic Integrity, visit the <u>Academic Integrity</u> Guide for an overview of the topic. For hands-on practice, complete the <u>Understanding and Avoiding Plagiarism tutorial</u>. For an explanation of what plagiarism is, you can also visit the website: <a href="http://plagiarism.org">http://plagiarism.org</a>.

#### **Details for our course:**

Accessing past versions of any graded materials (for example, Pre-Labs and Quizzes) is a violation of academic integrity. If you inadvertently have access to inappropriately posted coursework or information (eg, Pre-lab answers or quiz questions), you are obligated to inform the instructor. The access or utilization of any such information, even if you did not personally post or make them available, also constitutes an academic integrity violation.

Quizzes are open notebook (three-ring binder), which includes any material that instructors have posted on the course Canvas site, notes you've taken on linked resources such as Panopto videos, and any other notes that you have taken before the quiz started. Unless a particular resource is specifically allowed by the instructor in the quiz directions, no other resources, phone use, or communicating with anyone except the instructor during the quiz is permitted. During the time that the quiz is made available to the class (Monday 12:30pm – Tuesday 6 pm), students may not share the content, discuss the content, or discuss the difficulty with anyone. Students must refrain from any activity that would dishonestly or fraudulently improve their results or someone else's results, including working with another person (whether enrolled in the course or not) or misrepresenting identity.

Pre-Lab and Assignments may occasionally require seeking materials beyond what is posted by the instructor, and so information can be searched for online. However, the use of answer keys (for example, corrected Pre-Labs or Assignments obtained from prior students or the internet) or other similar resources is cheating. Consulting online tutoring services or other online websites (for example, Chegg or CourseHero) for help with assessments is specifically forbidden and is an academic integrity violation unless the student seeks and receives prior approval from the instructor.

It is a violation of academic integrity to share any question from graded coursework in any form. The posting (either verbatim or paraphrased) in full or in part of any coursework that is formally assessed for part of your course grade to online resources (such as Chegg) will also constitute an academic integrity violation. The instructor may choose to post answers after the assessment but remember that materials written by the instructor are copyrighted and you are not permitted to distribute them in any way; this may constitute a violation of US copyright law.

Students are expected to do their own work. You may not work with another student (or anyone else) on any graded coursework unless specifically authorized to do so on that assignment. Even in those cases, students are still responsible for doing their own work. Colluding on assessed work or free-riding from the work of others will constitute an academic integrity violation.

The minimum sanction for an academic integrity violation is a 0 on the assessment with the stipulation that the score may not be dropped and a report will be filed with the University. However, the sanction can be a full letter grade reduction or even failure of the course. Sanctions will be applied both to a student who supplies answers or information and the student who obtains answers or information.

## Student Conduct

In keeping with the University of Pittsburgh Student Code of Conduct, all students are expected to behave as respectful and civil members of the university community. All instructors and students will act in a considerate manner in order to create and maintain a classroom atmosphere that is conducive to learning. In addition to being unacceptable on the grounds of common decency, disruptive and disrespectful behavior contributes to unsafe working conditions.

Disruptive and disrespectful behavior will not be tolerated. Examples of disruptive behavior include, but are not limited to, repeated tardiness, texting in class, speaking or acting in any sexually, racially, or ethnically harassing manner, cheating, misuse and abuse of laboratory equipment and material, disregarding any safety guidelines. Disruptive students will be referred to the Office of Student Conduct for mediation, discipline, or both.

# Equity, Diversity, and Inclusion

The University of Pittsburgh does not tolerate any form of discrimination, harassment, or retaliation based on disability, race, color, religion, national origin, ancestry, genetic information, marital status, familial status, sex, age, sexual orientation, veteran status or gender identity or other factors as stated in the University's Title IX policy. The University is committed to taking prompt action to end a hostile environment that interferes with the University's mission. For more information about policies, procedures, and practices, visit the Civil Rights & Title IX Compliance web page.

I ask that everyone in the class strive to help ensure that other members of this class can learn in a supportive and respectful environment. If there are instances of the aforementioned issues, please contact the Title IX Coordinator, by calling 412-648-7860, or e-mailing <a href="mailto:titleixcoordinator@pitt.edu">titleixcoordinator@pitt.edu</a>. Reports can also be <a href="mailto:filed online">filed online</a>. You may also choose to report this to a faculty/staff member; they are required to communicate this to the University's Office of Diversity and Inclusion. If you wish to maintain complete confidentiality, you may also contact the University Counseling Center (412-648-7930).

## Gender Inclusive Language

Language is gender-inclusive and non-sexist when we use words that affirm and respect how people describe, express, and experience their gender. Just as sexist language excludes women's experiences, non-gender-inclusive language excludes the experiences of individuals whose identities may not fit the gender binary, and/or who may not identify with the sex they were assigned at birth. Identities including trans, intersex, and genderqueer reflect personal descriptions, expressions, and experiences. Gender-inclusive/non-sexist language acknowledges people of any gender (for example, first year student versus freshman, chair versus chairman, humankind versus mankind, etc.). It also affirms non-binary gender identifications and recognizes the difference between biological sex and gender expression. Students, faculty, and staff may share their preferred pronouns and names, and these gender expressions should be honored.

## Email Communication Policy

Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address.

Disability Resources	If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890/412-624-3346 (Fax), as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course. For more information, visit <a href="https://www.studentaffairs.pitt.edu/drsabout">www.studentaffairs.pitt.edu/drsabout</a> .
Recordings	Lectures will be recorded on Zoom for students who are unable to attend class synchronously. These recordings will be available on Canvas and are only for use by students in this course during this term.
Copyright Notice	These materials may be protected by copyright. United States copyright law, 17 USC section 101, et seq., in addition to University policy and procedures, prohibit unauthorized duplication or retransmission of course materials. See <u>Library of Congress Copyright Office</u> and the <u>University Copyright Policy</u> .