

# BIOSC 1865 Microbial Physiology Syllabus

Fall 2023

MWF 2:00 pm – 2:50 pm

Posvar 1502

**Instructor:** Dr. Laty A. Cahoon, [latycahoon@pitt.edu](mailto:latycahoon@pitt.edu) , office phone: 412-624-0183

**Office hours:** via Zoom Mon 4:30-5:30 pm & Weds 3:30-4:30 pm

**Office hours Link** for Mon 4:30-5:30 pm <https://pitt.zoom.us/j/96177377714>

**Office hours Link** for Weds 3:30-4:30 pm <https://pitt.zoom.us/j/91236462748>

	Monday	Wednesday	Friday
<b>Week 1</b>	8/28: Introduction	8/30: Fermentation	9/1: Journal Club 1
<b>Week 2</b>	9/4: No Class	9/6: Membrane Potential	9/8: Respiration
<b>Week 3</b>	9/11: Metabolic Decisions	9/13: Journal Club 2	9/15: Quiz 1
<b>Week 4</b>	9/18: Measuring Gene Expression	9/20: Environmental Responses	9/22: Journal Club 3
<b>Week 5</b>	9/25: Stress Responses	9/27: Flagellar Motility & Chemotaxis	9/29: Journal Club 4
<b>Week 6</b>	10/2: Two-Component Systems	10/4: Journal Club 5	10/6: Quiz 2
<b>Week 7</b>	10/9: Pilus Competence & Variation	10/11: Journal Club 6	10/13: No Class
<b>Week 8</b>	10/16: Pilus Twitching Motility	10/18: Journal Club 7	10/20: Cell Division I
<b>Week 9</b>	10/23: Cell Division II	10/25: Journal Club 8	10/27: Quiz 3
<b>Week 10</b>	10/30: Secretion Systems Part I	11/1: Secretion Systems Part II	11/3: Secretion Systems Part III
<b>Week 11</b>	11/6: Secretion Systems Part IV	11/8: Journal Club 9	11/10: Quiz 4
<b>Week 12</b>	11/13: Microbial Communities Part I	11/15: Microbial Communities Part II	11/17: Journal Club 10
<b>Week 13</b>	11/20: No Class	11/22: No Class	11/24: No Class
<b>Week 14</b>	11/27: Cell Differentiation Part I	11/29: Cell Differentiation Part II	12/1: Journal Club 11
<b>Week 15</b>	12/4: Cell-Cell Communication	12/6: Bacterial Multicellularity	12/8: Quiz 5

## Grading:

Quiz 1	15 points
Quiz 2	16 points
Quiz 3	16 points
Quiz 4	16 points
Quiz 5	15 points
<u>Journal Figure Facts</u>	<u>22 points (2 points each)</u>
Total	100 points

**Journal Clubs:** On days designated as Journal Clubs prior to class a short written assignment will be due to Canvas: figure facts using the figure facts template, you will be assigned one figure based on the starting letter of your last name. Journal clubs will be graded as follows: 2 pts per written assignment, if you volunteer or are selected to present a figure then you will receive 0.5 pts extra credit. No late assignments will be

accepted unless there are reasons outside of your control and you provide relevant documentation.

**Pre-requisites:** Students enrolled in BIOSC 1865 should have attained a grade of 'C' or better in BIOSC 1850 Microbiology and have taken a Biochemistry course (BIOSC 1000 or BIOSC 1810/1820).

**Textbook and Readings:** Because a single textbook does not adequately cover the material in this course, we do not recommend any one in particular. The current textbook for BIOSC 1850, Joan Slonczewski's *Microbiology: An Evolving Science* is helpful for background reading, or if a book was not used for Microbiology then the material used for your Microbiology course. Much of the material will be taken from primary sources and will be cited on each slide.

**E-mail:** 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. 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 the instructor for this course and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890 (phone)/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.

**Academic Integrity:** For quizzes, during the time that the assessment is made available to the class, 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.

Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity ([www.cfo.pitt.edu/policies/policy/02/02-03-02.html](http://www.cfo.pitt.edu/policies/policy/02/02-03-02.html)) will be required to participate in the outlined procedural process as initiated by

the instructor. A minimum sanction of a zero score for the quiz will be imposed, but sanctions can also include failure in the course.

**Missing a Quiz:** If you miss a Quiz for reasons outside of your control, you must provide relevant documentation to reschedule your Quiz.

**Face Masks:** If you are sick and/or coughing and feel the need to come to class, please wear a face covering that properly covers your nose and mouth when you are in the classroom. Nobody wants to get sick. Thank You.