### BIOSC 1865 - Microbial Physiology

**Syllabus Fall 2020**

**T/H 1:15 p – 2:30 pm; G20 William Pitt Union**

Dr. Jeffrey Lawrence  
Office Hours Wednesdays & Thursdays 10:00-11:00 am on Zoom  
jlawrenc@pitt.edu

Dr. Valerie Oke  
Office Hours Tuesdays 9:00-10:00 am & Wednesdays 3:00-4:00 pm on Zoom  
voke@pitt.edu

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<tr>
<th>Date</th>
<th>Topics</th>
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<tr>
<td>H 20 Aug</td>
<td>• Introduction to Microbial Physiology</td>
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<tr>
<td>T 25 Aug</td>
<td>• Fermentation</td>
</tr>
<tr>
<td>H 27 Aug</td>
<td>• Respiration</td>
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<tr>
<td>T 1 Sep</td>
<td>• Regulation and environmental response</td>
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<td>H 8 Sep</td>
<td>• Sulfur cycling</td>
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<td>T 10 Sep</td>
<td>• Photosynthesis and carbon cycling</td>
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<td>T 15 Sep</td>
<td>• Nitrogen cycling</td>
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<td>H 17 Sep</td>
<td>• Microbial Communities</td>
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<td>T 22 Sep</td>
<td>• Physics and Microbiology</td>
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<tr>
<td>H 24 Sep</td>
<td>• Extracellular metabolism</td>
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<td>T 29 Sep</td>
<td>• Cell differentiation</td>
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<td>H 1 Oct</td>
<td>• Multicellularity</td>
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<td>T 6 Oct</td>
<td>• Cell-cell communication</td>
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<td>H 8 Oct</td>
<td>• Quizzes (70% of course grade) will take place on Thursdays on material through the previous Thursday</td>
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<td>T 13 Oct</td>
<td>• Final Exam (25% of course grade) Monday, November 30 from 2:00-3:50 pm</td>
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**Prerequisites**

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). The material covered in this class will rely upon your familiarity with the subject material of these classes. Transfer students and auditing students should consult with Dr. Lawrence or Dr. Oke to ensure that they have completed the appropriate preparatory courses.

**In person and remote instruction**

Depending on University operating posture, this course will be delivered in the following ways. Under guarded risk, this course will include in-classroom instruction that remote students may participate in via Zoom and that will also be recorded. The classroom is large enough that all students may attend each class meeting. Under high and elevated risk, this course will be 100% online with Zoom meetings during class time that will be recorded. Changes to modes of instruction and course adjustments will be announced on Canvas as needed.
**COVID-19 safety**
In the midst of this pandemic, it is extremely important that you abide by public health regulations and University of Pittsburgh health standards and guidelines. While in class, at a minimum, this means you must wear a face covering and comply with physical distancing requirements; other requirements may be added by the University during the semester. These rules have been developed to protect the health and safety of all community members. Failure to comply with these requirements will result in you not being permitted to attend class in person and could result in a Student Conduct violation. For the most up-to-date information and guidance, please visit [coronavirus.pitt.edu](http://coronavirus.pitt.edu) and check your Pitt email for updates before each class.

**Recording statement**
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.

**Course materials and web site**
Detailed lecture notes, slides, and other material will be made available via Canvas.

**Textbook and readings**
Because a single textbook does not really 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. Lecture notes for Dr. Lawrence’s section, and review articles for Dr. Oke’s section, will also be posted on Canvas.

**Quizzes and final exam**
There are no mid-term examinations. Weekly online quizzes will be open on Canvas on Thursdays from 2:10-2:30 pm. Quizzes will be 15 minutes in duration and cover material ending the previous week (i.e., material introduced in the previous week will not be covered in a quiz). The final exam will be given on Monday, November 30 from 2:00-3:50 pm.

**Missed quizzes or exam**
Quizzes are expected to be completed on the day they are given. To accommodate unforeseen circumstances (illness, internet connection issues, etc.), the lowest two quiz scores will be dropped from the calculation of final grades. Additional quizzes missed for medical reasons, or other extenuating circumstances, can be made up if written documentation is provided. Make-ups will likely take the form of an oral exam. All students are required to take the final exam.

**Office hours**
Office hours for Dr. Lawrence and for Dr. Oke are noted above or you are welcome to make an appointment. Remember that office hours and appointments are useful for all students, whether you are performing poorly on quizzes or you are confused about a specific topic or you are confident in your grasp of the course material but want to ensure that your deductions and inferences are sound. You may utilize office hours of either of us regardless of who is currently teaching.

**Final grades**
Final grades are calculated by combining points scored on the quizzes (70%), after dropping the lowest score, and the final exam (25%). The remaining 5% of your grade is earned by homework assignments. *Extra-credit assignments cannot be employed to augment final grades.* Petitions to regrade a quiz or exam must be made in writing within one week of the availability of the scored quiz or exam.

**G Grades**
G grades are given when students who have been attending a course and have been making regular progress are prevented by circumstances beyond their control from completing the course after it is too late to withdraw. You should submit a petition for a G grade in writing, including valid documentation. If you miss the final exam, you may receive a G grade if the above conditions are met.

**Disability Resources**
If you have a disability for which you are or may be requesting an accommodation, contact us and the Office of Disability Resources and Services, 140 William Pitt Union, (412) 648-7890 (phone) or (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.

**Email Communication**
Each student is issued a University email address (*username@pitt.edu*) which may be used for official communication with students. Students are expected to read email sent to this account on a regular basis. Failure to react in a timely manner does not absolve the student from complying with the content of the communications. Students that choose to forward their email 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.
**Academic Integrity**

For online quizzes and the final exam, 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 or exam will be imposed, but sanctions can also include failure in the course.

**Turnitin**

Students agree that by taking this course all required assignments may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of Turnitin.com page service is subject to the Usage Policy and Privacy Pledge posted on the Turnitin.com site.