

# MCB 526 Fall 2018 Advanced Bacterial Pathogenesis

## Syllabus, Assignments, Grading Policies

**Course:** MCB 526 (CRN#54202) – Graduate/Honors Companion Course to MCB 426

**Instructor:** [Brenda Anne Wilson, Ph.D., Professor of Microbiology](#)

Office: B209 CLSL

Email: [wilson7@illinois.edu](mailto:wilson7@illinois.edu)

URL: <http://mcb.illinois.edu/faculty/profile/wilson7>

**Office hours:** TBA after 1<sup>st</sup> week of classes or by appointment in B209 CLSL

**Time & Location:** Wednesdays at 6pm in B124 CLSL

**Course Objectives:** To discuss and critique cutting edge papers in the area of bacterial pathogenesis. New paradigms and approaches will be discussed, as well as the importance of the paper in context of the current literature. At the end of this course, students will have been exposed to current “hot topics” in bacterial pathogenesis, as well as experimental approaches and techniques, at the interface of classical and modern microbiology, immunology and cell biology. Moreover, students will have been presented with guidelines on how to read, digest, and critique the literature, as well as write a mini-review of a selected topic in the literature.

**Class Schedule and Assignments:** Each class will meet for ~1 hour, once a week. Key paper(s), plus one or two reviews, that are relevant to the material covered in MCB 426 will be assigned each week (I will post citations ahead of time by the end of the previous week). All students in the class are expected to have read the assigned papers thoroughly and should come to class prepared to discuss them in detail. If a student would like to suggest a relevant paper for discussion during one of the class periods, please contact me two weeks before the assignment is posted.

### **Final Assignment: Short Critical Review due by 5:00 p.m. on Monday December 17**

Each student will choose a recent paper (from 2016-present) that they feel makes a significant contribution to the field of bacterial pathogenesis (it cannot be one that we cover in class or one that the lab you are working in has published, although the topic could be related). It is essential that you can justify that it is an important paper in a good scientific journal. As soon as you have identified a paper – but no later than **5:00 pm on Friday, November 16**, please provide me with a copy of the paper for approval (to make sure that it is suitable – if you need help, come see me during office hours). Include along with the paper a paragraph explaining why you think it is significant and appropriate for this review. Each student will write a short critical review featuring the selected key paper. The review text should be **3,000-3,500 words** total in length (typed, single-spaced, 1” margins, 10-12 point font) and have **no more than 10 key citations in addition to the feature paper (11 citations total)** that support the review content (no more than 2 of those citations may be from web sources and at least 1 should be a relevant background review article, while at least 5 supporting articles should be from the primary literature). Include a cover page with the title of the review (something attention-drawing), your name, affiliation, date and short abstract (90-100 words). References (not included in the word limit) should be complete with names of all authors, title of article, and journal citation (year, volume, pages). Web sources should be cited with URL and date downloaded or accessed. Any sources that are not readily available to the reader (i.e., me) should be included as an appendix to the paper. The paper should also **include at least one original detailed, fully labeled figure or table** (not included in the word limit) that illustrates an important concept, presents a proposed model, or summarizes important information from multiple sources that enhances the understanding of the topic. This figure or table should make a significant contribution to the paper. The student is responsible for generating an **original** figure or table (simply copying a figure, image or table from elsewhere is **NOT** acceptable, but hand-drawn is fine so long as it is legible).

**Grading: Total of 100 points (80 points = “B”, grade format = ABCDF-plus/minus)**

25 pts Class attendance and preparation for class (mandatory) – There will be a SIGN-In sheet.

Each absence will cost 5 points.

If your absence is excused (as per URL: <http://www.las.illinois.edu/students/attendance/absences/>), you may earn up to the full 5 points back. If your absence is unexcused (for any reason), you may earn up to 3 of the 5 points back. See below for details. Only 2 makeups will be allowed.

25 pts Class participation and contribution to discussions – For full credit you need to talk more than just when it is your turn. If I call on you and you are not prepared or are poorly prepared to discuss the paper, then that will impact your grade.

50 pts Mini-review featuring the chosen key paper – scores will be based on:

- (10 points) Choice of feature paper and a paragraph justifying your choice of paper as a key paper that makes an important contribution to the field of bacterial pathogenesis. Please also submit a pdf copy of your key paper for approval. Deadline: 5 pm on November 16. Late submission will result in automatic 5-point deduction.
- (10 points) Organization and clarity of presentation of major points in the lead feature paper and other key relevant papers – title of review should reflect content and have some “appeal” to draw audience – incorporate the key points of the paper into your discussion (without focusing just on this key paper).
- (10 points) Depth and scope of coverage of the background information important for understanding the significance of the paper.
- (10 points) Figure or table – originality, quality of presentation content and how well it integrates or summarizes the relevant information.
- (10 points) Convincing arguments (with literature evidence) that support your assessment of the important contribution that the paper makes to the field. Appropriate choice of references will be important.
- Deadline: 5pm on December 17. Late submission will result in an automatic 10-point deduction for every day (24 hours) that it is overdue.

**Undergraduate Honors (H) Credit for MCB 426:** Undergraduates wishing to receive honors credit for MCB 426 may do so by participating in this course and earning  $\geq 80$  points (grade = “B”). Students cannot receive honors credit *and* course credit at the same time; so, you must choose which form of credit you want from the start. Students in the MCB Honors curriculum should confer with Dr. Shawna Naidu for obtaining credit. James Scholars and others should fill out the appropriate online applications. If you are an undergraduate and wish to take the course for course credit as a graduate-level course, you may get my approval, but bear in mind that this will not count for credit toward your MCB undergraduate degree.

**Making up for an absence:** If you miss a class, are late to a class by more than 15 min (which will count as an absence) for any reason or are not prepared for class (i.e., it is obvious you did not read the assignments, which will count as an absence), you may make up the absence by submitting a 600-word written summary of each of the assigned papers for that class, including interpretation of each of the figures and a summary of the main points of the topic as well as a few closing remarks about significance of the findings of the paper. If there is an associated review article, you should include a discussion of the key paper(s) in the context of the review commentary. The summary should be submitted through the Moodle site by the next class period or as per arrangement with me. Be sure to indicate on the file, which day you are making up. Since in-person class participation is an important component of this course, you will be allowed only 2 such absences; any subsequent absences will result in loss of 5 points each (no makeup).