

MCB 100 – Introductory Microbiology – Fall 2019

Course Rubric: MCB 100 (3 credit hour, CRN#30499)

Course Meeting Time and Location: MWF, 2:00-2:50 pm, 2079 Natural History Building

Course Directors:

Brenda A. Wilson, PhD Professor, Department of Microbiology URL: http://mcb.illinois.edu/faculty/profile/wilson7 Office: B209 Chem Life Sci Lab (CLSL) Email: wilson7@illinois.edu Office Hours: Thursdays, 5:15-6:30pm, B124 CLSL	Collin Kieffer, PhD Assistant Professor, Department of Microbiology URL: http://mcb.illinois.edu/faculty/profile/collink/ Office: 325 Burrill Hall Email: collink@illinois.edu Office Hours: Tuesdays, 2:30-3:30pm, 333 Burrill
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Course TA: Mr. Zachary Aboff, Email: zaboff2@illinois.edu, will be assisting with grading and course logistics and will be available for office hours twice (2 x 1 hour per week: Mondays 12:00-1:00pm & Fridays 4:00-5:00pm) or by appointment in the MCB Learning Center in 101 Burrill Hall.

Course Description:

Introductory Microbiology (MCB 100) is designed to introduce students to the fascinating field of microbiology, where students will explore the invisible world of microbes, including bacteria, fungi, and parasites, and viruses. Students will learn about the properties and activities of microbes and why they matter to life on earth, including consideration of their important roles in natural processes, such as photosynthesis, ecology, nutrition, and health and disease. Students will gain foundational knowledge of microbial biology ranging from basic structural and cellular function and methods of experimental study to the use and control of microbes in industrial fermentations, in agriculture and biotechnology, in sanitation and environmental remediation, and in health promotion and disease prevention.

Introductory Microbiology (MCB 100) is a general education course offered by the Molecular and Cellular Biology instructional program that satisfies the General Education Criteria for Nat Sci & Tech – Life Sciences and serves non-MCB majors, such as Animal Science, Food Science, Pharmacy, Kinesiology, Engineering, etc.

Course Learning Objectives:

After taking this course, students will be able to:

1. Understand the components of scientific literacy and the process of scientific inquiry.
2. Communicate complex scientific information.
3. Apply simple predictive models to microbiology-related phenomena.
4. Understand how paradigms of microbiology relate to society and policy and their own lives.
5. Critically evaluate science-related news and information for their credibility and validity.
6. Apply critical thinking and reasoning skills to solve problems related to microbiology.
7. Possess a general working knowledge of fundamental biological concepts relevant to microbiology.
8. Recognize that microbiology is a dynamic, collaborative, and inter-disciplinary field.

COURSE TEXTBOOK, WEBSITE, AND MASTERING BIOLOGY MANAGEMENT TOOL

The textbook for this course is ***Microbiology: with Diseases by Taxonomy*** by Robert W. Bauman, 6th Edition, Pearson Education, Inc., 2020.

The eText comes with an on-line Modified Mastering Microbiology Course Management Tool, which should be purchased and accessed from the publisher: Pearson Education, through the Moodle course website. Directions on how to access the website and setup a username and password have been emailed to you. These can also be found on the Moodle course website in Learn@illinois.edu under the “Announcements” tab. Hardcopy versions of the textbook are also available.

COURSE ASSESSMENTS

The course assessments are centered around the lecture material, which includes reading assignments, pre-lecture quizzes, lecture notes and discussion, in-class questions and activities, homework, team-based projects, and in-class examinations.

GRADING:

1,000 points total – 40 class periods

400 pts – 4 exams (100 pts each)

150 pts – In-class iClicker questions and/or activities (5 pts for each set, top 30 scores used)

150 pts – introductory tutorial & quiz, pre-lecture quizzes (10 pts for each, top 15 scores used)

100 pts – homework assignments (10 pts for each, top 10 scores used)

200 pts – 2x 4-member team poster/pamphlet projects (100 pts each), scores based on:

- 20 pts – Part A – 2-page executive summary – grade assessment from TA and instructor
- 20 pts – Part B – team-designed poster/pamphlet – grade assessment from TA and instructor
- 60 pts – Part C – peer-evaluation of executive summary and poster/brochure
 - 30 pts based on evaluations from other students
 - 30 pts based on evaluation of other teams' travel advisories (each student must evaluate other team's information material)

Grade Cutoffs: (out of 1,000 total points)

A	–	950
A-	–	900
B+	–	850
B	–	800
B-	–	750
C+	–	700
C	–	650
C-	–	600
D+	–	550
D	–	500
D-	–	450
F	–	<450

ACADEMIC INTEGRITY:

As UIUC students, everyone in this course is expected to be completely familiar with the *UIUC Student Code, Article 1. Part 4. Academic Integrity (sections 401-406)*. Cheating will NOT be tolerated in this course. Any student found cheating could face receiving a failing "F" grade for the course and recommendation for suspension or dismissal from the University.