

Syllabus – FALL 2021

Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Course and Instructor Information

Course Title: MCB2610, Fundamentals of Microbiology

Credits: # 4 credits

Format Lecture: In-Person, ITE C80

Format Laboratory: In-Person, either Gant West 009, 010, or 012

Prerequisites: Organic Chemistry, Introductory Biology

Professor: Dr. Kathleen A. Feldman

Email: Kathleen.feldman@uconn.edu

Telephone: 860-486-4337

Office Hours/Availability: Beach Hall Room 201B - In-person office hours will be available on Tuesdays and Thursdays 9:30am to 10:30am or by appointment. You may request an appointment by sending Dr. Feldman an email. Please allow up to 24 hours for a reply to an email. Most questions will be answered in less than 24 hours.

Microbiology Laboratory Supervisor: Dr. Gino Intrieri

Telephone: 860-486-4253

Office: Gant West Room 115

Email: gino.intrieri@uconn.edu

Laboratory Teaching Assistants: TBD

Scheduling: Linda McCollam - Guilani

Email: Linda.McCollam-Guilani@uconn.edu

Course Materials

All course information will be posted on the UConn Blackboard website which is accessible with your net ID at <http://lms.uconn.edu>

Required course materials should be obtained before the first day of class. Required textbooks are available for purchase through the [UConn Bookstore](#) (or use the Purchase Textbooks tool in HuskyCT). Textbooks can be shipped ([fees apply](#)).

Required Lecture Text: This semester we will be using a totally on-line textbook and learning assessment tool called “WileyPlus”. You may purchase the access code directly from John Wiley & Sons publishers (\$69) at www.wileyplus.com, or from the UConn Bookstore (\$83.35). **All students MUST purchase the access code to view the on-line textbook and access the on-line assignments.** We will be using the new 3rd Edition Wessner, Dupont, and Charles, Microbiology textbook. A hard copy textbook is available but is **NOT** necessary for this course since you will already have access to the online textbook through WileyPlus. Note: Wiley offers a 14 day free trial if you are not ready to purchase.

Access to WileyPlus: Go to www.wileyplus.com

Use class code: **A19046**

(We are using the **New WileyPlus platform – 3rd edition Wessner Textbook**)

click “Create Account”

Check “user agreement” then “continue”

Required Laboratory Manual (Fall 2021 Edition): Available for purchase through the UConn Bookstore – Fall 2021 Hard copy Lab manual (\$41.67) – **Note: Students will also need to purchase a disposable lab coat available through the UConn Bookstore (\$8.95)**

Additional course readings and media are available within HuskyCT, through either an Internet link or Library Resources

Course Description

This course is designed to provide students with an introduction to the field of microbiology. Students will learn the fundamentals of microbiology, survey the world of microorganisms, and study the interaction between microbes, their hosts, and their effects on the environment. There will also be laboratory exercises each week that will teach the basics of handling, culturing, and identifying microorganisms.

Course Objectives

Specific Learning Outcomes:

By the conclusion of this course students will be:

- Acquainted with the harmful and beneficial effects of microbes on their hosts and the environment.
- Familiar with the ecology, genetics, life cycle, and biological processes found in microorganisms.
- Knowledgeable of the classification of microorganisms and the tools used to study them

Course Requirements and Grading

Summary of Course Grading:

Course Components	Weight
Exam 1	15%
Exam 2	15%
Exam 3	15%
Exam 4 (Final Exam)	15%
Wileyplus Assignments	15%
Laboratory	25%

Lecture Exam format, content, and point value: Students will all take the lecture exams at the same time, i.e., synchronously (see time/dates below). Exams may be taken in the lecture hall (ITE C80) or at a location of the student's choosing. Exams will consist of 50 multiple-choice questions and will be taken on-line using Respondus Lockdown Browser and Respondus Webcam monitor. You must download these programs before taking the exams. You must also have a computer with a Web-cam. Exam study outlines will be posted on HuskyCT. **Grades for each exam are not scaled. (Note: Lockdown Browser is not compatible with ChromeBooks or portable devices)**

Lecture Exam 1 (60 minutes)

Tuesday, September 21st at 8am to 9am

Chapter 1 and Appendix B (Microscopy)

See Exam 1 Study Outline on HuskyCT for additional exam information

Lecture Exam 2 (60 minutes)

Tuesday, October 19th at 8am to 9am

Chapter 7A and Chapter 7B

See Exam 2 Study Outline on HuskyCT for additional exam information

Lecture Exam 3 (60 minutes)

Tuesday, November 16th at 8am to 9am

Chapters 2, 4 and 6

See Exam 3 Study Outline on HuskyCT for additional exam information

Lecture Exam 4 (Final Exam) 60 minutes, non-cumulative

Time and date to be determined by the Registrar's Office

Chapter 8 and Chapter 10

See Exam 4 (Final Exam) Study Outline on HuskyCT for additional exam information

Lecture exam make-ups - No make-up exams will be given unless necessitated by medical or family EMERGENCY. The instructor may require proof of such emergency. **The student must contact the instructor within 24 hours of the examination to discuss possible arrangements.** Any make-up examination allowed by the instructor is usually in essay format and must be completed within seven days of the original examination date.

Wiley plus

You are required to complete 16 on-line WileyPlus assignments (available at www.wileyplus.com), which will be worth 15% of your final grade. **Wiley Plus assignment #1 (a tutorial) must be completed by September 12 at 11:59 pm. All other assignments will be due by 11:59 pm on December 12th. NO EXCEPTIONS!** You must complete all 16-posted assignments; however, the lowest assignment grade will be dropped.

Microbe Minutes

At the beginning of each class, we will spend a few minutes talking about an interesting microorganism. The information will **not** be posted on HuskyCT. There will be 4 questions on each exam on this material.

Guest Speakers

I have scheduled four speakers to come in throughout the semester to speak about current research topics in Microbiology. Each exam will include 4 questions from these special presentations.

Assigned Readings

In addition to the assigned chapters in the textbook you will be given four (4) Primary Literature Research Articles to read, based on the topics of the Guest Speakers, one for each exam. These articles will be posted on HuskyCT. Each exam will include 4 questions from the assigned Research Article.

Extra credit opportunities:

Option #1: Primary Research Article Summary and Critique (4 points will be added to one exam) – An extra-credit scientific paper will be posted on Husky CT which you should read and provide a thoughtful summary and critique (2 pages, 12 pt double spaced). The paper should be submitted via email or hard copy to Dr. Feldman by Tuesday, November 30th at 11:59 pm. No late submissions will be accepted.

Option #2: Syllabus Quiz (1 point will be added to one exam) – Answer the 10 question Syllabus Quiz on Husky CT. You will have until Thursday September 16th at 11:59 pm to complete this and you must get a score of 100% (Note: You can take it multiple times).

Laboratory:

Lab supplies: You will need a disposable lab coat that can stay in the lab all semester. You can purchase the recommended lab coat at the UCONN Bookstore (\$8.95 - disposable, long version blue or purple). Protective eyewear and disposable gloves will be provided. We also ask that you tie back long hair and wear closed-toed shoes.

Final Course Grading Scale:

Grade	Letter Grade	GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

Due Dates and Late Policy

All course due dates are identified in the Course Outline/Calendar on the last page of this document. *The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.*

Feedback and Grades

I will make every effort to provide feedback and grades within 2 days of submission. To keep track of your performance in the course, refer to My Grades in HuskyCT.

Weekly Time Commitment

You should expect to dedicate approx. **12** hours a week to this course (including both lab and lecture). This expectation is based on the various course activities, assignments, and assessments and the University of Connecticut's policy regarding credit hours. More information related to hours per week per credit can be accessed at the [Online Student website](#).

Student Authentication and Verification

The University of Connecticut is required to verify the identity of students who participate in courses with online exams and to establish that students who are registered in a course are the same students who are completing the on-line exams. Verification and authentication of student identity in this course will include:

1. Secure access to the learning management system using your unique UConn NetID and password.
2. Online exams with webcam verification with ID check

Assessment Monitoring

Lecture Exams will be given on-line using Respondus Lockdown Browser and Respondus Webcam Monitor which can be downloaded for free from the class HuskyCT website. Note: Respondus Webcam Monitor requires either a built-in or add-on webcam to take the lecture exams. Also note that Lockdown Browser is not compatible with ChromeBooks.

Mask Wearing Mandate

Until further notice, to ensure a safe learning environment for everyone, masks/face coverings must be worn at all times when inside buildings, including in the classroom, regardless of vaccination status. If a student is not wearing a mask/face covering, they will be asked by the instructor to put one on immediately or leave the classroom. Repeatedly failing to follow this expectation will result in a referral to Community Standards. Activities that involve temporarily removing the mask, such as eating or drinking are not allowed. Please leave the classroom for such activities. If an instructor is not wearing a mask/face covering, students should feel comfortable asking the instructor to put one on immediately. More information about proper usage of masks is available from UConn Environmental Health and Safety at this [link](#).

Although social distancing will not be required inside classrooms for vaccinated individuals, please be respectful of the wishes of others who prefer to maintain social distancing. For their own protection, unvaccinated individuals are requested to maintain 6 feet social distancing from others.

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
 - Academic Integrity
 - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or <http://csd.uconn.edu/>.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government.” (Retrieved March 24, 2013 from [Blackboard's website](#))

Software/Technical Requirements (with Accessibility and Privacy Information)

The software/technical requirements for this course include:

- HuskyCT/Blackboard ([HuskyCT/ Blackboard Accessibility Statement](#), [HuskyCT/ Blackboard Privacy Policy](#))
- [Adobe Acrobat Reader](#) ([Adobe Reader Accessibility Statement](#), [Adobe Reader Privacy Policy](#))
- Microsoft Office (free to UConn students through [uconn.onthehub.com](#)) ([Microsoft Accessibility Statement](#), [Microsoft Privacy Statement](#))
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).
- WebCam

For information on managing your privacy at the University of Connecticut, visit the [University's Privacy page](#).

NOTE: This course has NOT been designed for use with mobile devices.

Help

[Technical and Academic Help](#) provides a guide to technical and academic assistance.

This course is completely facilitated online using the learning management platform, [HuskyCT](#). If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the [Help Center](#). You also have [24x7 Course Support](#) including access to live chat, phone, and support documents.

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

University students are expected to demonstrate competency in Computer Technology. Explore the [Computer Technology Competencies](#) page for more information.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the [Office of Institutional Research and Effectiveness](#) (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.

Copyright

My lectures, notes, handouts, and displays are protected by state common law and federal copyright law. They are my own original expression and I've recorded them prior or during my lecture to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. I will inform you as to whether you are authorized to record my lectures at the beginning of each semester. If you are so authorized to record my lectures, you may not copy this recording or any other material, provide copies of either to anyone else, or make a commercial use of them without prior permission from me.

University of Connecticut
MCB 2610 – Fundamentals of Microbiology
Course Outline and Policies
Fall Semester 2021

*Note: List of topics and appropriate text chapter may change as the semester progresses

Date	Lecture Topic	Text Chapter and Reading Assignments	Wiley Plus Assignments*
TUES AUG 31	Overview of Microbiology and Evolution	1	1 (due 9/12/21 at 11:59pm)
THURS SEPT 2	Microbiology History	1	2
TUES SEPT 7	Microscopy and Staining	Appendix B	3
THURS SEPT 9	Microscopy and Staining	Appendix B	
TUES SEPT 14	Microscopy and Staining	Appendix B	4
THURS SEPT 16	Guest Lecture: Dr. Jonathan Klassen	Research Article #1 "Fungus eating Ants"	Syllabus Quiz Due
TUES SEPT 21	Lecture Exam I	See Study Outline Exam #1	
THURS SEPT 23	Microbial Growth	7A	5
TUES SEPT 28	Microbial Growth	7A	6
THURS SEPT 30	Microbial Growth	7A	
TUES OCT 5	Microbial Growth	7A	7
THURS OCT 7	Guest Lecture:	Research Article #2	
TUES OCT 12	Eliminating Microbes	7B	8
THURS OCT 14	Eliminating Microbes	7B	
TUES OCT 19	Lecture Exam 2	See Study Outline Exam #2	
THURS OCT 21	Bacterial and Archaeal Cell Structure	2 and 4	9
TUES OCT 26	Bacterial and Archaeal Cell Structure	2 and 4	10
THURS OCT 28	Bacterial and Archaeal Cell Structure	2 and 4	
TUES NOV 2	Guest Speaker:	Research Article #3	11
THURS NOV 4	Enzymes	6	
TUES NOV 9	Catabolism and Anabolism	6	12
THURS NOV 11	Catabolism and Anabolism	6	
TUES NOV 16	Lecture Exam 3	See Study Outline Exam 3	
THURS NOV 18	DNA Replication and Gene Expression	8	13
TUES NOV 23	Thanksgiving Recess		
THURS NOV 25	Thanksgiving Recess		
TUES NOV 30	DNA Replication and Gene Expression	8	14 and 15 Extra Credit Paper Due
THURS DEC 2	Guest Speaker:	Research Article #4	
TUES DEC 7	Bacterial Genetic Analysis	10	16
THURS DEC 9	Bacterial Genetic Analysis	10	All due 12/12/21 at 11:59pm
Finals Week 12/12 to 12/18	Final Lecture Exam (60 minutes) Date & Time to be determined by Registrar's Office	See Study Outline Exam 4 (Final Exam)	

*Lecture Text: *"Microbiology", Wessner, Dupont, & Charles, 2017 3rd Ed) John Wiley & Sons. Available through an on-line access code at www.wileyplus.com*

WileyPlus Homework Assignments - Assignment #1 is a tutorial and is due by September 12, 2021 by 11:59 pm. All other assignments are due by December 12, 2021 at 11:59 pm. You must complete all 16-posted assignments; however, the lowest assignment grade will be dropped.