

Research Literature in MCB - Environmental Microbiology
Dept of Molecular and Cell Biology

Syllabus – Spring 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: MCB3841W-004 - Research Literature in MCB - Environmental Microbiology

Credits: # 3 credits

Format: Distance Learning (online - asynchronous)

Prerequisites: Organic Chemistry, Introductory Biology, Fundamentals of Microbiology

Professor: Dr. Kathleen A. Feldman

Email: Kathleen.feldman@uconn.edu (preferred method of contact)

Telephone: 860-486-4337

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

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](#)).

Lecture Text:

Required Text: A Short Guide to Writing about Biology (8th or 9th edition), Jan A. Pechenik, ISBN:0-321-15981-0 (approx. \$6.00 used or \$65.00 new)

Optional Recommended Text (Not required but helpful): Any majors Microbiology textbook would be a good resource.

Current primary literature research articles will be assigned during the course of the semester.

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 environmental microbiology primarily by reading, discussing, and writing about contemporary topics in environmental microbiology as found in the primary research articles. The goal of this course is to improve communication skills on three levels: (1) conducting database searches, (2) providing presentations both formal and informal, and (3) completing well-structured and well-written papers.

Course Objectives

Specific Learning Outcomes:

By the conclusion of this course students will be:

- Acquainted with some of the contemporary topics in environmental microbiology
- Familiar with the ecology and biological processes found in microorganisms.
- Develop skills reading and understanding primary literature articles
- Develop skills necessary to communicate effectively in the biological sciences through presentations and written papers
- Understand the process involved in completing well-structured and well written papers

Course Requirements and Grading

Summary of Course Grading:

Assignments, Grading, and Approx. Page Count:

5 % Personal Statement (2 pages)
10 % Primary Article Summary/Critique #1 (2 pages)
10 % Primary Article Summary/Critique #2 (2 pages)
10 % Primary Article Summary/Critique #3 (2 pages)
10 % Primary Article Summary/Critique #4 (2 pages)
10 % Primary Article Summary/Critique #5 (2 pages)
15 % Final Power Point Presentation
15 % Final Research Paper (5-7 pages)
15 % Participation in on-line discussions

Assignment Weight:

Course Components	Points	Weight
Personal Statement	50	5%
Summary/Critiques	500	50%
Final Presentation	150	15%
Final Paper	150	15%
Participation in on-line discussions	150	15%
Total	1000	100%

Discussions: Discussion board assignments are based on your assigned article readings. You will be assigned a primary research article to read and several questions for discussion will be provided. You are expected to post at least 5 responses per article. Discussion grading for each article is out of 30 points therefore posting more than 5 responses is recommended. Discussions should be thoughtful and polished. Writing mechanics are always considered in grading, including the discussion work.

Personal Statement: This will consist of a maximum two-page summary of your background and accomplishments which you may use for a professional school or job application

Article Summary/Critiques: There will be 5 article summaries due throughout the semester. The goal of the summaries is to provide you with practice in reading papers from the primary literature. This will help you to learn and evaluate the quality and importance of the papers you read. Article summaries should be a maximum of 2 pages in length.

Final Presentation: Each student will be required to put together a 20 minute Power Point presentation on a topic of their choice in the field of Environmental Microbiology (topic subject to approval from the instructor) and will write a final research paper based on its contents.

Final Research Paper: You will write a 5 to 7 page research paper on a topic in Environmental Microbiology that is of interest to you (topic subject to approval from the instructor). You will search for primary literature using on-line data bases and may also consult textbooks or websites for background information; however, you cannot use textbooks or websites as cited information sources. You must use at least 8 primary journal articles of which 4 may be review articles published in the scientific literature.

SafeAssign: This course uses Safe Assign which is a tool used to prevent plagiarism and to create opportunities to help students identify how to properly attribute sources. "SafeAssign compares submitted assignments against a set of sources to identify areas of overlap between the submitted assignment and existing works".

Due Dates and Late Policy

All course due dates are identified in the Course Outline/Calendar on the last page of this document. Deadlines are based on Eastern Time; if you are in a different time zone, please adjust your submittal times accordingly. *The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.*

Late Work receives a zero except for cases of emergency. Late work will only be accepted under cases of documentable emergencies. Emergencies would include hospitalization or illness for which you have received a doctor's note or a family member's documentable medical emergency.

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

Feedback and Grades

I will make every effort to provide feedback and grades within 1 week 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. **9 – 10** hours a week to this course. 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 online courses and to establish that students who register in an online course are the same students who participate in, complete the course activities and assessments, and receive academic credit. 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.

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).

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.

MCB 3841W – Section 004
Research Literature in Molecular & Cell Biology
Environmental Microbiology
Spring Semester 2021

Due Date	Course Schedule	Required Reading*
WEEK 1 Jan 19 to Jan 24	Video - Introduction and Course Overview Video - Academic integrity – Plagiarism Quiz due Video - Writing lab discussion Video - Outline Personal Statement	Chapter 1 Chapter 12 Chapter 2
WEEK 2 Jan 25 to Jan 31	Draft Personal Statement Due On-line Discussion Board of Article #1 Video - Discuss how to write research article summaries	Chapter 3 and 7 Article #1 Chapter 4
WEEK 3 Feb 1 to Feb 7	Draft of Research Article Summary 1 Due Draft Personal Statement Returned Video - Discuss Prologue/Abstract/Paper/Oral Presentation – pick research topic On-line Discussion board of Article #2	Chapter 5 Article #2
WEEK 4 Feb 8 to Feb 14	Draft of Title and Prologue Due Draft of Research Article Summary 2 Due Draft of Research Article Summary 1 Returned Final Personal Statement Due	Chapter 6
WEEK 5 Feb 15 to Feb 21	Draft of Research Article Summary 2 Returned Final Research Article Summary 1 Due Video - Discuss common writing errors Final Personal Statement Returned On-line Discussion Board of Research Article 3	Article 3
WEEK 6 Feb 22 to Feb 28	Draft of Research Article Summary 3 Due Final Research Article Summary 2 Due Final Research Article Summary 1 Returned Video - Discuss common writing errors Final Title and Prologue Due On-line Discussion Board of Research Article 4	Chapter 11 Article 4
WEEK 7 Mar 1 to Mar 7	Draft of Research Article Summary 4 Due Final Research Article Summary 2 Returned Draft of Research Article Summary 3 Returned Final Title & Prologue Returned On-line Discussion Board of Research Article 5	Article 5
WEEK 8 Mar 8 to Mar 14	Draft of Research Article Summary 5 Due Draft Research Article Summary 4 Returned	

WEEK 9 Mar 15 to Mar 21	Final Research Article Summary 3 Due Final Research Article Summary 4 Due Draft Research Article Summary 5 Returned Video – How to put together the PowerPoint Presentation and final research paper	
WEEK 10 Mar 22 to Mar 28	Final Research Article Summary 3 Returned Final Research Article Summary 5 Due Final Research Article Summary #4 Returned	
WEEK 11 Mar 29 to Apr 4	Final Research Article Summary #5 Returned Work on Draft of Final Research Paper and Power Point Presentation	
WEEK 12 Apr 5 Apr 11	Draft of Final Research Paper is due to instructor	
WEEK 13 Apr 12 to Apr 18	Spring Break	
WEEK 14 Apr 19 to Apr 25	PowerPoint Presentation due Draft of Final Research Paper is returned to student with instructor comments	
WEEK 15 Apr 26 to May 2	Reading Days	
Finals Week May 3 to May 8	Final Exam Week – No Final Exam Final Revised Research Paper Due on 5/4/21	

- A Short Guide to Writing about Biology (9th edition), Jan A. Pechenik.
- **Note: Due date for all assignments is the Sunday of the week it is assigned. Submit all assignments by email to Dr. Feldman by 11:45 pm on each Sunday.**