# Fall 2022 MCB6937

# Biology of Microorganisms/Special Topics in Microbiology Department of Microbiology and Cell Sciences

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<b>WEEK</b> 08-21 08-28	<b>TOPICS</b> Introduction to Microbiology and Microscopy Macromolecules and Cellular Chemistry, Prokaryotes vs Eukaryotes
09-04	Cell Biology, Cell Structure and Function- Microscopy
09-11 <b>EXAM ONE</b>	Microbial Growth, Nutrition  September 18-20, 2022 (Chapters 1-5, 7)
LAAN ONL	September 10 20, 2022 (Chapters 1 3, 7)
09-18 09-25	Bacterial Metabolisms, Metabolic Pathways, Respiration and Fermentation Bacterial Genetics, Regulation of Gene Expression
10-02	Horizontal Gene transfer (HGT) Bioinformatics, Genomics, Metagenomics
10-09	Recombinant DNA Technology, Genetic Engineering, Cloning
<b>EXAM TWO</b>	October 13-15, 2022 (Chapters 10-14)
10-16 10-23	Survey of Microorganisms, Cellular and Acellular Structures, Virology Microbial Ecology; Applied and Environ. Microbiology, Primary Produces
10-23 10-30	Microbial Ecology; Applied and Environ. Microbiology, Primary Produces Chemotherapeutics-Antibiotics, antivirus, and other antimicrobial Agents
10-23	Microbial Ecology; Applied and Environ. Microbiology, Primary Produces
10-23 10-30 <b>Exam THREE</b> 11-06	Microbial Ecology; Applied and Environ. Microbiology, Primary Produces Chemotherapeutics-Antibiotics, antivirus, and other antimicrobial Agents  November 05-07, 2022 (Chapters 6, 9, 16-18, 20)  Immunity, Innate (Natural) vs Acquired (Specific) Immunity, AMI and CMI
10-23 10-30 <b>Exam THREE</b> 11-06 11-13	Microbial Ecology; Applied and Environ. Microbiology, Primary Produces Chemotherapeutics-Antibiotics, antivirus, and other antimicrobial Agents November 05-07, 2022 (Chapters 6, 9, 16-18, 20)  Immunity, Innate (Natural) vs Acquired (Specific) Immunity, AMI and CMI Hypersensitivity, Autoimmunity, Immunodeficiency, Immuno-Oncology
10-23 10-30 <b>Exam THREE</b> 11-06	Microbial Ecology; Applied and Environ. Microbiology, Primary Produces Chemotherapeutics-Antibiotics, antivirus, and other antimicrobial Agents  November 05-07, 2022 (Chapters 6, 9, 16-18, 20)  Immunity, Innate (Natural) vs Acquired (Specific) Immunity, AMI and CMI

## Exam FOUR December 03-05, 2022 (Chapters 32-40)

## **NOTE:** See Canvas for required reading assignments

**COURSE DESCRIPTION** (from catalog), introduces the principles and techniques of microbiology, genetics, taxonomy, biochemistry and ecology and microorganisms. Also studies virology, immunology, and the pathogenicity of microorganisms.

**COURSE OBJECTIVES**: Provide students with a foundation in microbiology and explore current areas of interest.

**REQUIRED TEXTBOOK**: Textbook (E-BOOK) for this course is Prescott's Microbiology by Willey, Sherwood and Woolverton, 12<sup>th</sup> Edition in the form of E-book from Connect by McGraw Hill Education (Required). See the ISBN on UF registrar's office website. Use the link provided in Canvas to access McGraw Hill Connect website. The E-book contains study aide and the required readings assigned for each exam. The e-textbook also serves as a reference that provides tutorial information, helps students prepare for the lectures, and provides supplemental materials for the lectures. Connect also provides

practice exams. Students may take these exams multiple times. These exams draw questions from a pool of questions drawn for lectures and required reading materials. Most of the tables and figures used in the lectures come from this website and the e-book. Online Quizzes are also conducted via Connect as well.

**CANVAS COURSE WEBSITE**: The class is on E-learning (Canvas). The class syllabus, lecture presentations, study guides, and other materials will be posted on E-Learning throughout the semester. Questions about lecture material should be addressed during office hours or via email. **Course details, clarifications, and Updates about the class policies will be posted online as announcements and/or emails on a regular basis. Students should check their emails and announcements on Canvas on a daily basis.** 

**McGraw Hill Connect Website:** Connect by McGraw Hill Prescott's Microbiology by Willey, Sherwood and Woolverton, 12<sup>th</sup> Edition is required for this course. See UF Registrars Office website for correct ISBN number. Access this site requires purchasing of an access code through UF All Access. Purchasing print version of the textbook does not provide access code for Connect. Course website in Canvas provides a link to Connect. This site provides complete access to textbook chapters, online quizzes, figures, tables, etc. The site also contains the required readings assigned for each exam. The e-textbook serves as a reference that provides tutorial information, helps students prepare for the lectures, and provides supplemental materials for the lectures. It also provides practice exams. Students may take these exams multiple times. These exams draw questions from the lectures and required reading materials. Most of the tables and figures used in the lecture notes come from this website and the e-book. Online quizzes are conducted via Connect as well.

**Attendance:** Attendance is not required. There are no live, in-class sessions. Pre-Recorded Lectures are posted on MediaSite and can be accessed through a link on elearning course site under Modules.

**EXAMS:** Four scheduled exams are given via Honorlock. Exams are conducted via Honorlock using a USB external wide-angle camera. Use of External Camera is required for all exams taken via Honorlock. Exams taken without the use of external camera are not valid and the student will receive a score of ZERO (0) for that exam. You will have 90 minutes to complete each exam.

Use of External Side View Camera: Department of Microbiology & Cell Science requires the use of external side view web-camera with Honorlock for ALL online assessments. All exams will be administered through Honorlock using Canvas course website. Students will use their own computers with an external camera (120° wide angle) for side-view monitoring. It is the student responsibility to purchase an external camera and properly set it up prior to starting each exam. See the course website in Canvas for tutorials and more details on the proper use of External Camera. Use of SCRATCH PAPERS OR ANY OTHER RESOURCES IS PROHIBITED DURING THE EXAM SESSION.

Exam materials come from **lectures presentations**, **lecture notes**, **and assigned textbook readings**. Study guide posted for each exam provides an excellent outline for topics covered for each exam. *In some cases information presented in class may be in* 

<u>In these cases exam questions will be based only on the information available in the textbook, lecture notes, or materials presented during the lecture presentations, and exams will be graded accordingly.</u> Practice exams/answers available through Connect website to familiarize students with materials covered for each exam. Students should use these practice exams as real assessments of learning rather than study guides.

Online Extra Credit Quizzes: There are EIGHT online quizzes available through Connect Website. Each quiz carries 5 points and includes 10 questions. You take these quizzes online Through Connect. You do not need Honorlock to submit these quizzes. See the Connect course website for more details. Points from these quizzes are added to your total scores in the course. Taking Extra Credit Quizzes are considered timely class participations. They are designed to keep students engaged with the course. Therefore, Quizzes are closed after the due date and no late submission is possible. See Canvas under "QUIZZES" for date/time for each quiz. Each quiz remains open for seven (7) days. Quizzes will no longer be available in Connect after the due date

## GRADING/TESTS: The final class grade is based on accumulated points

There are four (4) regularly scheduled non-cumulative exams, 100 points each (50 M/C questions). Exams are on Canvas via Honorlock. The course is based on 400 points. Points from Online Extra Credit Quizzes are considered bonus points and will be added on top of your total scores. A written (short answer) makeup exam is allowed for a missed exam due to an **excused** absence. Makeup exam contains short answer questions, fill-in-the blank questions, but it does not contain any multiple choice or T/F questions.

# Grading scale (Total accumulated points including exams and quizzes):

- A 360 400 points
- A- 356 359.9 points
- B+ 348 355.9 points
- B 320 347.9 points
- B- 316 319.9 points C+ 308 – 315.9 points
- C 280 307.9 points
- C- 275 279.9 points
- D 240 274.9 points
- E 000 239.9 points

**ACADEMIC HONESTY**: As a result of completing the registration form at the University of Florida, I assume that every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

**STUDENTS WITH DISABILITIES**: Students requesting accommodations should register with the Dean of Students Office and forward a copy of their accommodation letter to me and to ProctorU. Proper accommodations will be provided through Canvas and ProctorU.

**UNIVERSITY SUPPORT SERVICES**: Resources are available on campus for students having personal problems or lacking clear career and academic goals that interfere with their academic performance. These resources include:

- University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling.
- Student Mental Health, Student Health Care Center, 392-1171, personal counseling.
- Sexual Assault Recovery Services, 392-1161.
- Student Health Care Center, 392-1161.
- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

#### **Useful Links:**

- Center for Disease Control and Prevention: CDC: http://www.CDC.gov
- **US Food and Drug Administration:** FDA: <a href="http://www.FDA.gov">http://www.FDA.gov</a>
- **US Environmental Protection Agency:** EPA <a href="http://www.EPA.gov">http://www.EPA.gov</a>
- Microbiology and Cell Science: MCS: <a href="http://microcell.ufl.edu">http://microcell.ufl.edu</a>
- College of Agriculture and Life Sciences: CALS: <a href="http://www.ifas.ufl.edu">http://www.ifas.ufl.edu</a>
- **University of Florida Libraries:** UF Libraries: <a href="http://www.uflib.ufl.edu">http://www.uflib.ufl.edu</a>
- **University of Florida:** UF: http://www.ufl.edu

End Note: I genuinely care about your success in this course. Please reach out to me via email, phone calls, text messages. Your well-being during the semester is paramount to everything else. Please take care of your health while going through these stressful times in your professional life. Let me know if I can be of any assistance to you.