## MCB 6937 Special Topics in Microbiology Summer 2022

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Office Hours by Appointment Only

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Lect. Date	TOPICS
1. 5/09	Introduction to Microbiology and Microscopy
2. 5/10	Macromolecules and Cellular Chemistry
3. 5/11	Prokaryotes vs Eukaryotes-Acellular Structures
4. 5/12	Cell Biology, Cell Structure and Function
5. 5/13	Cell Biology, Cell Structure and Function
6. 5/16	Microbial Growth and Nutrition-Culture Media
7. 5/17	Microbial Growth and Nutrition-Culture Media
8. 5/18	Bacterial Metabolism; Respiration vs. Fermentation
<b>EXAM ONE</b>	Friday-Monday May 20-23, 2022, (Sessions 1-7)
9. 5/19	Bacterial Metabolism; Catabolism vs Anabolism
10. 5/20	Bacterial Genome Replication, Transcription, and Translation
11. 5/23	Regulation of Bacterial Gene Expression
12. 5/24	Regulation of Bacterial Cellular Responses
13. 5/25	Regulation of Bacterial Cellular Responses
14. 5/26	Horizontal Gene transfer (HGT), Genomics and Bioinformatics
15. 5/27	Recombinant DNA Technology, Genetic Engineering, Cloning
Exam TWO	Friday-Monday May 27-30, 2022, (Sessions 8-14)
16. 5/30	Survey of Microorganisms, Viruses and other Acellular Structures
17. 5/31	Virus-Host Interactions-Mechanism of Viral Pathogenicity
18. 6/01	Microbial Ecology; Applied and Environ. Microbiology-Primary Producers
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19. 6/02	Control of Microbial Growth-Chemotherapeutics
19. 6/02 20. 6/03	Control of Microbial Growth-Chemotherapeutics Antibiotics, Antivirals, and Other Antimicrobial Agents
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19. 6/02 20. 6/03 <b>EXAM THREE</b> 21. 6/06	Control of Microbial Growth-Chemotherapeutics Antibiotics, Antivirals, and Other Antimicrobial Agents Friday-Monday June 3-6, 2022, (Sessions 15-20)  Immunity; Innate vs. Acquired Immunity, AMI and CMI
19. 6/02 20. 6/03 <b>EXAM THREE</b> 21. 6/06 22. 6/07	Control of Microbial Growth-Chemotherapeutics Antibiotics, Antivirals, and Other Antimicrobial Agents Friday-Monday June 3-6, 2022, (Sessions 15-20)  Immunity; Innate vs. Acquired Immunity, AMI and CMI Immunity; Innate vs. Acquired Immunity, AMI and CMI
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19. 6/02 20. 6/03 <b>EXAM THREE</b> 21. 6/06 22. 6/07 23. 6/08 24. 6/09 25. 6/10 26. 6/13	Control of Microbial Growth-Chemotherapeutics Antibiotics, Antivirals, and Other Antimicrobial Agents Friday-Monday June 3-6, 2022, (Sessions 15-20)  Immunity; Innate vs. Acquired Immunity, AMI and CMI Immunity; Innate vs. Acquired Immunity, AMI and CMI Hypersensitivity, Autoimmunity, Immunodeficiency Cancer, Immuno-Oncology, Immunotherapeutic Drugs Principles of Diseases, Mechanism of Pathogenicity-Virulence Factors Public Health Microbiology, Epidemiology-Clinical Microbiology/Immun.
19. 6/02 20. 6/03 <b>EXAM THREE</b> 21. 6/06 22. 6/07 23. 6/08 24. 6/09 25. 6/10	Control of Microbial Growth-Chemotherapeutics Antibiotics, Antivirals, and Other Antimicrobial Agents Friday-Monday June 3-6, 2022, (Sessions 15-20)  Immunity; Innate vs. Acquired Immunity, AMI and CMI Immunity; Innate vs. Acquired Immunity, AMI and CMI Hypersensitivity, Autoimmunity, Immunodeficiency Cancer, Immuno-Oncology, Immunotherapeutic Drugs Principles of Diseases, Mechanism of Pathogenicity-Virulence Factors

## **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 student 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, 11<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. 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. McGraw Hill 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 Extra Credit Quizzes** are also conducted via McGraw Hill Connect as well. Use the link provided in Canvas to access quizzes in McGraw Hill Connect website

**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:** McGraw Hill Connect for Prescott's Microbiology by Willey, Sherwood and Woolverton, 11<sup>th</sup> Edition in the form of E-book is required for this course. See UF Registrars Office website for correct ISBN number. Access this site requires purchasing of an access code. Purchasing print version of the textbook does not provide access code for McGraw Hill Connect. You purchase the access code through UF All Access. See the announcements posted in Canvas for more details.

Course website in Canvas provides a link to McGraw Hill 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 McGraw Hill Connect as well. Use the link provided in Canvas to access McGraw Hill Connect website.

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

**EXAMS:** Four scheduled exams are given via ProctorU. Students take the exams on Canvas via ProctorU Test Management System using their own computers and location of their choice; however, both of these are subject to ProctorU restrictions. Exams are given during the dates stated in the syllabus. You must reserve a spot for each exam in advance. See Canvas and ProctorU for exam times and dates. You will have 90 minutes to complete each exam. You need to register with the ProctorU Test Management System and reserve your spots for all four exams in advance. To ensure you get your preferred time, you **MUST** complete all your reservations by the first week of classes.

It is the Students responsibility to prepare for their exams: by choosing a location that is acceptable to ProctorU, and by Updating their computers software in order to be in compliance with ProctorU technical requirements. You must contact ProctorU several days in advance to make sure that your exam location and your computer meet the ProctorU standards. 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 contradiction with information from other sources*, *especially internet-posted materials*. *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*. Practice exams/answers available through McGraw Hill 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 McGraw Hill Connect Website. Each quiz carries 5 points and includes 10 questions. You take these quizzes online Through McGraw Hill Connect. You do not need ProctorU to submit these quizzes. See the McGraw Hill Connect course website for more details. Points from these quizzes are added to your total scores in the course. Taking quizzes are considered

timely class participations. 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 McGraw Hill 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 ProctorU. 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 points from exams and quizzes):

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Α
       360 - 400 points
A-
       356 - 359.9 points
B+
       348 - 355.9 points
       320 - 347.9 points
В
B-
       316 - 319.9 points
C+
       308 - 315.9 points
       280 - 307.9 points
С
C-
      275 - 279.9 points
       240 - 274.9 points
D
Ε
      000 - 239.9 points
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**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: http://www.uflib.ufl.edu
- **University of Florida:** UF: <a href="http://www.ufl.edu">http://www.ufl.edu</a>

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.