Course Website: **MCB 300**

**When:** MWF 9:00 – 9:50 am

**Where:** 3025 Campus Instructional Facility

**GENERAL DESCRIPTION OF MCB 300**

Emphasizes fundamental concepts of microbiology, including nutrition, physiology, genetics, molecular biology, ecology and evolution of microorganisms, and their role in nature, human health and disease.

**PRE-REQUISITES**

MCB 250 and credit or concurrent registration in MCB 252 or consent of instructor.

Credit is not given for both MCB 300 and MCB 100.
Instructors

First 20 Lectures:
Dr. Cari Vanderpool
C226 CLSL
(217) 333-7033
cvanderp@illinois.edu

Virtual Office Hours: Fridays 9:00-9:50AM
Dr. Vanderpool Friday Virtual Office Hours
Meeting ID: 965 608 7247
Password: 200019
(or by appointment)

Second 20 Lectures
Dr. Steven Blanke
302 Burrill Hall
(217) 244-2412
sblanke@illinois.edu

Virtual Office Hours: Fridays, 9:00 am – 9:50 am by Zoom
Join Zoom Meeting
Dr. Blanke Friday Virtual Office Hours
Meeting ID: 561 477 4714
Password: 915830

Course Coordinator

Renee Alt
232A Burrill Hall
(217) 333-4306
rlalt@illinois.edu
Office Hours: By appointment only

Any questions about policies, LON-CAPA, enrollment, etc. should be emailed to the course coordinator. Please include your name and the course number for which you have a question (the coordinator works with multiple courses). When in doubt about directing a question, email the coordinator first and they will assist you.

Teaching Assistant

Sabrina Abdulla
abdulla3@illinois.edu
Virtual Office Hours: Wednesdays 2:30-3:30 PM
Link: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA
Learning Outcomes
At the end of the course, through assignments, discussions, activities and assessments, students will be able to:

• Appreciate the tremendous diversity of the microbial world, in all its glory.
• Describe and contrast the cell structures and physiology of members of all three domains, the Bacteria, the Archaea, and the Eukarya.
• Explicate how microbes generate energy and synthesize the biomolecules needed for both cell structure and work through metabolic homeostasis.
• Provide details of how microbes regulate their metabolism and all functions required for life.
• Recognize why microbial diversity is important, and how diversity is achieved through evolution.
• Expound upon the importance of viruses in driving evolution.
• Wax poetic about the complexity of microbial community structures and how members of these communities work together to provide novel biological functionality.
• Give examples of how the human microbiome profoundly affects human health and disease.
• Communicate the basic nature and dynamics of infectious diseases at the public health level.
• Discuss the evolution of virulence.
• Present experimental strategies to identify pathogenic microbes responsible for causing disease.
• Explain and provide examples of virulence strategies associated with pathogenic microbes.
• Compare and contrast virulence strategies and diseases caused by bacteria, viruses, and pathogenic eukaryotes.
• Talk about next-generation strategies for combatting antimicrobial treatments.
• Convince your grandparents about the importance of vaccination for public health.

Textbook
The textbook for this course is *Brock: Biology of Microorganisms* by Madigan, Martinko, Stahl and Clark, Pearson Education, Inc., 2015 (15th edition). E-book versions (web or downloadable) can be purchased from the publisher (www.mypearsonstore.com) for less than the price of the hardcover version. A copy of the textbook is also on reserve at the Undergraduate Library and the Learning Center (101 Burrill Hall). Note: Although all material on exams will be covered in lecture, the textbook is strongly recommended reading for enhanced understanding of the course material.

Course Policies:
All students are assumed to have read and understood the “Code of Policies and Regulations Applying to All Students,” University of Illinois, and will be expected to act accordingly. The Code is available online at: http://www.admin.uiuc.edu/policy/code/index.html

Disabilities and Religious Observances:
Please contact the course coordinator during the first week of classes to make requests for disability accommodations or observation of religious holidays.
Overall MCB 300 Class Structure

MCB 300 in Fall, 2021 will have a blended course structure:

**(A) Asynchronous pre-recorded lecture videos on course content.**
There will be 40 pre-recorded lectures, generally 40-50 minutes long, which can be downloaded at any time after release on the MCB 300 Website.

**(B) In Person/Synchronous class time.**

During each scheduled class time (9:00 – 9:50 am, MWF), there will in-person meetings (Monday and Wednesday), according to distributed attendance (see below) or virtual office hours (Friday). The purpose of this in-class time is to augment and provide additional clarity to the course content delivered in pre-recorded lectures. **NOTE: There will not be any additional course material presented during in-class sessions. All the material that you will be responsible for during course assessments will be contained in pre-recorded lectures.**

**Distributed attendance:** To generate smaller discussion sections, each student will be assigned a group, either 1 or 2, and will attend in-person class sessions only once per week. Please note that in-person class attendance is mandatory and is worth 36 points out of a total of 1000 points available in the course. Synchronous, in-person class time will be mandatory during weeks 1, 2, 4, 6, 7, 9, 10, 11, 13, 15 and 16 (see course schedule).

GROUP 1: Group 1 students are required to attend class only on Mondays.
GROUP 2: Group 2 students are required to attend class only on Wednesdays.

**Learning opportunities during in-person class sessions:**

- **30 minutes** (combination of 1 or more of the following)
  - Videos selected to augment learning material presented in pre-recorded class lectures
    - TED Talks
    - Howard Hughes Medical Institute
    - National Institutes of Health
    - Career development tools
  - Class discussion
    - PackBack “questions of the week”
    - current topics
  - Small-group Homework Sessions
    - Small groups of students may work together on open homework assignments

- **20 minutes**
  - Open office hours (Q & A)
ASSESSMENTS: Grading Policies

Basis for Course Grades:

Plus and minus letter grades will be used for semester grades.

The Grading Scale is as follows:

A+ 960-1001  C+ 720-759
A  920-959    C  680-719
A- 880-919    C- 640-679
B+ 840-879    D+ 600-639
B  800-839    D  560-599
B- 760-799    D- 520-559
F  less than 520

All point totals are estimates and may be altered slightly throughout the course of the semester. The point totals contained in the table represent the use of the plus/minus grading system coupled with a 4.0 grade point system. The University has assigned the grade point values shown for each letter grade. Students who earn the points shown (out of 1000 possible points) will be guaranteed the indicated letter grade. At semester's end, after the final exam, the faculty will analyze the course grade distribution, and may decrease, but will not increase the points needed for each grade.

Point distribution:
A. 3 exams     100 points each (no drops)  300 points possible
B. 1 final exam 100 points each (no drops)  100 points possible
C. 8 home-works 35 points each (1 drop)  245 points possible
D. 12 Packback assignments 20 points each (2 drops)  200 points possible
E. 35 Lecture Refresher Micro-Quizzes 4 points each (5 drops)  120 points possible
F. 11 weeks of in-class participation points 5 points each (4 drops)  35 points possible

TOTAL POINTS 1000 points
DESCRIPTION OF COURSE ASSESSMENTS

Exams

Four exams will be administered over the course of the semester, each covering 10 lectures. While the exams are NOT cumulative, it should be understood that material within each module of the course builds upon materials covered earlier in the semester. Exams will not be administered during the assigned class time (i.e., 9:00 – 9:50 am). See the course schedule for days/times of the exams.

In general, you will be responsible for any material covered, either spoken or written, in the recorded lecture. This includes a broad understanding of material covered in external videos, whose URLs are embedded within the recorded lectures. In addition, exam material may include questions from homework or the Lecture Refreshers Micro-quizzes. Occasionally, questions that are highlighted within Packback assignments, may also be used on exams.

Homework

There will be 8 homework assignments worth 35 points each. The lowest homework score may be dropped.

Each homework (worth 35 points total) will be composed of 8 multiple choice questions (3 points each, for a total of 24 points) and one or more short answer questions (11 points total). The lectures covered by each homework assignment can be found in the course calendar. Homework assignments will open at 10 am and close at 9 am on the dates indicated in the course calendar. Homewor

Please make sure that you are able to access LON-CAPA in advance of your first homework. If you have problems please contact Renee Alt for assistance.

Packback

Participation is a requirement for this course, and the Packback Questions platform will be used for online discussion about class topics. Packback Questions is an online community where you can be fearlessly curious and ask open-ended questions to build on what we are covering in class and relate topics to real-world applications.

Packback Requirements:

Your participation on Packback will count toward 20% of your overall course grade. There will be 12 Packback assignments administered over the course of the semester, and due dates are indicated in the course calendar.

There will be Weekly Thursday at 11:59PM CST and Weekly Saturday at 11:59PM CST deadline for submissions. In order to receive full credit, you should submit the following per each deadline
period:

- An original question (worth 10 points), due on the specified Thursdays at 11:59pm, pertaining to material covered in the specified lectures.
- Original answers to two questions (5 points each) submitted by other students, due on the specified Saturdays at 11:59pm

**How to Register on Packback:**

An email invitation will be sent to you from help@packback.co prompting you to finish registration. If you don’t receive an email (be sure to check your spam), you may register by following the instructions below:

1. Create an account by navigating to https://questions.packback.co and clicking “Sign up for an Account”
   Note: If you already have an account on Packback you can log in with your credentials.

2. Then enter our class community’s lookup key into the “Looking to join a community you don’t see here?” section in Packback at the bottom of the homepage.
   Community Lookup Key: 7796be97-6757-45ad-9b61-ddd299fea10d

3. Follow the instructions on your screen to finish your registration.

Packback may require a paid subscription. Refer to [www.packback.co/product/pricing](http://www.packback.co/product/pricing) for more information.

**How to Get Help from the Packback Team:**

If you have any questions or concerns about Packback throughout the semester, please read their FAQ at [help.packback.co](http://help.packback.co). If you need more help, contact their customer support team directly at help@packback.co.

For a brief introduction to Packback Questions and why we are using it in class, watch this video: [vimeo.com/packback/Welcome-to-Packback-Questions](http://vimeo.com/packback/Welcome-to-Packback-Questions)

Here are some additional videos to help you learn how to use Packback effectively:

- The Curiosity Score
- How to check my grades
- How to get help from Packback
- How to ask a question

You can also consult with the TA (Sabrina Abdulla) for questions about PackBack.

**Lecture Refresher Micro-Quizzes**

35 Lecture Refresher Micro-Quizzes will be administered during the semester, as indicated in the course calendar. Each Lecture Refresher Micro-Quiz will be worth 4 points total, and will be comprised of 1, 2, or 4 questions covering the material from a single lecture, which will be due at 9:00 am on the morning when the following lecture is released. For example, your Micro-quiz for
Lecture 1 will be due at 9:00 am on the morning when Lecture 2 is released. Your 5 lowest Lecture Refresher Quiz grades will be dropped, and there will NOT be an opportunity to “make-up” missed quizzes.

**Assessment Policies: Re-grades**

If you believe that an answer was improperly graded on an exam or quiz you must fill out a copy of the "Request for Re-grade" form available on the "Forms" link on the course web site. This form must be completed and either electronically sent to Renee Alt (rlalt@illinois.edu) or a hard copy delivered to her office (232 Burrill Hall). **Please note:** you do not need to hand in the original assignment.

*All requests for re-grades must be made within one week of the day that the graded paper was returned.* Due dates for re-grades can be found under the "Regrade Due Dates" link on the website. The grader has the option to leave the score as is and comment further on the answer in question, accept the argument presented and award additional points or lower the original score if he/she finds additional mistakes that were missed during the first round of grading. The paper will be re-evaluated and returned to you within one week of its submission.

Final exams will not be returned to the student and will remain the property of the course, nor will answer keys be posted or made available in any way. Students may make an appointment with Renee Alt in order to view the final but it will stay in the procession of MCB staff. Final exams will not be subject to the MCB 300 regrade procedure, concerns should be directed to Renee Alt.

**Learning Management System for MCB 300: LON-CAPA Information**

The MCB 300 Website contains a direct link to the LON-CAPA website (http://www.lon-capa.uiuc.edu) and the login page. Students accessing the LON-CAPA network for the completion of homeworks must first log into this site. Detailed Access Instructions can be found there and part of it is reproduced below:

Welcome to LON-CAPA at UIUC! We will be using LON-CAPA, or Lecture Online Network with Computer-Assisted Personalized Approach, in your MCB course. The software was officially piloted in MCB during the Spring 2005. The program itself is a combination of learning assessment tools with course management capabilities. You will be using LON-CAPA this semester to access and complete MCB 300 homework, exams, and Lecture-Refresher quizzes.

**Access Instructions:** In order to log into LON-CAPA you must have a username and a password. Your username is your UIUC NetID (the first part of your University email address). The password for LON-CAPA will have to be established by setting up an Active Directory (AD) password through CITES. To set up your Active Directory password visit the following site: [http://www.ad.uiuc.edu/accounts.aspx](http://www.ad.uiuc.edu/accounts.aspx).

Click on the Change PASSWORD box to set up your password if you haven't already used Active Directory, then select the CITES Passwords box. You will then need to enter your NetID and NetID password. When setting the password be certain that ONLY the box for AD password is checked.
Uncheck the other password boxes. Set up your Active Directory password (please make a note of it to avoid forgetting it later!). Also note that if you have used the AD password in previous semesters, like in other LON-CAPA courses or for WebCT, it is a good idea to change your password for security concerns.

Once you have created an AD password go to the LON-CAPA website at: www.lon-capa.uiuc.edu. This log in page will ask you to enter your LON-CAPA username (your UIUC NetID) and password (CITES AD password you created). The domain, uiuc is already filled in for you. After successful login, you will get to a screen with your currently available courses and roles, for example student in MCB 300. Select the course you would like to access. Once you have logged in you can access any of the LON-CAPA content by selecting Main Menu. Inside the course, you can access your assignments (e.g., quizzes) by selecting Navigate Contents at the top of the screen or by clicking on the icon. Clicking on the folders will display the contents within. Once you have selected a problem in a folder you can move through the folder by clicking forward and backward on the arrow buttons at the top of the screen or by going back to Navigate Contents and clicking on each link.

**Browsers:** LON-CAPA functions using all common and current web browsers, like Mozilla, Firefox, and Safari on PC and Macs, as long as JavaScript and cookies are enabled in your browser. Internet Explorer is not recommended as security boxes will pop up after each page loads. If you have problems seeing figures or getting content to load on your computers, try switching to a different web browser.

**Logging out:** Make sure you always exit LON-CAPA by either clicking on the exit link at the top right of the screen or by clicking on the exit icon under Main Menu; do not simply close the web browser! If you share a computer or use a computer lab make sure when you are in LON-CAPA you see your name at the top right of the screen.

**Troubleshooting:** The major cause of problems in using LON-CAPA is students being unable to login. There are two common reasons for this: a locked password or forgetting the password. If the Active Directory password has not been used in a while it is locked for security reasons. The solution to this is to go to the Active Directory website (see above) and click on the unlock ACCOUNT box. If you have forgotten your password click in the change PASSWORD box used when the account was first set up, or contact the CITES Help Desk at 244-7000, and specify you have forgotten your Active Directory password. As always when resetting the password make sure only the AD password box is checked. **Do not contact the MCB office or the LON-CAPA Support Staff for questions about forgotten passwords!** The AD passwords are handled by CITES exclusively.

**If you have any problems using LON-CAPA, contact Renee Alt (rlalt@illinois.edu).** If your question is about a specific issue you encounter while in LON-CAPA, please use the internal communication function, and specify your name, course, section letter, and question (include assignment number, problem number, etc., if applicable).
Week-by-Week Course Schedule: MCB 300, Fall 2021

PART 1: Dr. Vanderpool

WEEK 1
Date: Monday, August 23, 2021
Assignments Due: None
New Assignments Open: Homework #1 opens at 10:00 am, Lectures 1-4, Closes at 9:00 am on Wednesday, September 8, 2021 (Lon Capa)
Videos to Watch:
1. Course Introduction: Review of Class Information/Policies
2. Introduction to PackBack Video
3. Lecture 1: The essence of Microbiology – Setting the Table I – Stepping through the portal into the enormous world of the world's smallest biological entities
Supportive Reading: *Chapter 1, Brock Biology of Microorganisms (16th Edition)*
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: None

Date: Wednesday, August 25, 2021
Assignments due: Lecture Refresher Micro-Quiz on Lecture #1 – due at 9:00 am (Quiz #1)
New Assignments Open: None
Videos to Watch: Lecture 2: The essence of Microbiology – Setting the Table II
Supportive Reading: *Chapter 1, Brock Biology of Microorganisms (16th Edition)*
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: [TA Zoom Office Hours](#)
Meeting ID: 881 9202 4265
Password: 300TA

Date: Friday, August 27, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #2 – due at 9:00 am (Quiz #2)
New Assignments Open: None
Videos to Watch: Lecture 3: The essence of Microbiology – Setting the Table III
Supportive Reading: *Chapter 1, Brock Biology of Microorganisms (16th Edition)*
In-Person Meeting: None
Virtual Office Hours (Dr. Vanderpool) and Packback Introduction: 9:00-9:50am
[Dr. Vanderpool Friday Virtual Office Hours](#)
Meeting ID: 965 608 7247
Password: 200019
WEEK 2
Date: Monday, August 30, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #3 – due at 9:00 am (#3)
New Assignments Open: None
Videos to Watch: Lecture 4: The essence of Microbiology – Setting the Table IV
Supportive Reading: Chapter 2, Brock Biology of Microorganisms (16th Edition)
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: None

Date: Wednesday, September 1, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #4 – due at 9:00 am (#4)
New Assignments Open: Homework #2 opens at 10:00 am, Lectures 5-8, Closes at 9:00 am Wednesday, September 16, 2021 (Lon Capa)
Videos to Watch: Lecture 5: The essence of Microbiology – Setting the Table V
Supportive Reading: Chapter 2, Brock Biology of Microorganisms (16th Edition)
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, September 2, 2021
Assignments Due: Packback 1A: Single Question stemming from Lectures 1-5 due at 11:59pm CST.

Date: Friday, September 3, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #5 – due at 9:00 am (#5)
New Assignments Open: None
Videos to Watch: Lecture 6: The essence of Microbiology – Setting the Table VI
Supportive Reading: Chapter 2, Brock Biology of Microorganisms (16th Edition)
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am
Dr. Vanderpool Friday Virtual Office Hours
Meeting ID: 965 608 7247
Password: 200019

Date: Saturday, September 4, 2021
Assignments Due: Packback 1B: Responses to two questions stemming from Lectures 1-5 due at 11:59PM CST

WEEK 3
Date: Monday, September 6, 2021: LABOR DAY HOLIDAY
Assignments Due: None
New Assignments Open: None
Videos to Watch: None
Supportive Reading: None
In-Person Meeting: None
Virtual Office Hours: None

Date: Wednesday, September 8, 2021
Assignments Due:
1. Homework #1 CLOSES at 9:00 am
2. Lecture Refresher Micro-Quiz on Lecture #6 – due at 9:00 am (#6)
New Assignments Open: None
Videos to Watch: Lecture 7: The essence of Microbiology – Setting the Table VII: Replication
Supportive Reading: Chapter 6, Brock Biology of Microorganisms (16th Edition)
In-Person Meeting: None
Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, September 9, 2021
Assignments Due: Packback 2A: Single Question stemming from Lectures 6-7 due at 11:59pm CST.

Date: Friday, September 10, 2021
Assignments Due: Lecture Refresher Micro-Quiz – due at 9:00 am (#7)
New Assignments Open: None
Videos to Watch: Lecture 8: The essence of Microbiology – Setting the Table VIII: Mechanisms of Genetic Regulation
Supportive Reading: Chapter 7, Brock Biology of Microorganisms (16th Edition)
In-Person Meeting: None
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am Dr. Vanderpool Friday Virtual Office Hours
Meeting ID: 965 608 7247
Password: 200019
**Date:** Saturday, September 11, 2021  
**Assignments Due:** Packback 2B: Responses to two questions stemming from Lectures 6-7 due at 11:59PM CST

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**WEEK 4**  
**Date:** Monday, September 13, 2021  
**Assignments Due:** Lecture Refresher Micro-Quiz on Lecture #8 – due at 9:00 am (#8)  
**New Assignments Open:** None  
**Videos to Watch:** Lecture 9: The essence of Microbiology – Setting the Table IX: Metabolic Regulation Central Metabolism  
**Supportive Reading:** *Chapter 7, Brock Biology of Microorganisms (16th Edition)*  
**In-Person Meeting:** Group 1 (only) in 3025 Campus Instructional Facility  
**Virtual Office Hours:** None

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**Date:** Wednesday, September 15, 2021  
**Assignments Due:**  
1. Homework #2 CLOSES at 10:00 am  
2. Lecture Refresher Micro-Quiz on Lecture #9 – due at 9:00 am (#9)  
**New Assignments Open:** None  
**Videos to Watch:** Lecture 10: The essence of Microbiology – Setting the Table X: Metabolism 2  
**Supportive Reading:** *Chapter 3, Brock Biology of Microorganisms (16th Edition)*  
**In-Person Meeting:** Group 2 (only) in 3025 Campus Instructional Facility  
**Virtual Office Hours:** TA Zoom Office Hours  
Meeting ID: 881 9202 4265  
Password: 300TA

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**Date:** Thursday, September 16, 2021  
**Assignments Due:** Packback 3A: Single Question stemming from Lectures 8-10 due at 11:59PM CST.

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**Date:** Friday, September 17, 2021  
**Assignments Due:** None  
**New Assignments Open:** None  
**Videos to Watch:** None  
**Supportive Reading:** None
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am [Dr. Vanderpool Friday Virtual Office Hours]
Meeting ID: 965 608 7247
Password: 200019

Date: Saturday, September 18, 2021
Assignments Due: Packback 3B: Responses to two questions stemming from Lectures 8-10 due at 11:59PM CST.

WEEK 5
Date: Monday, September 20, 2021
Assignments Due: Exam #1 Covers Lectures 1-10 Time, LonCapa
New Assignments Open: Homework #3 opens at 10:00 am, Lectures 11-14, Closes at 9:00 am on Monday, October 5, 2021 (Lon Capa)
Videos to Watch: Lecture 11: Parts and Processes – How Microbes Work I: Metabolism 3, Energy Generation – A
Supportive Reading: Chapter 3, Brock Biology of Microorganisms (16th Edition)
In-Person Meeting: None
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am [Dr. Vanderpool Friday Virtual Office Hours]
Meeting ID: 965 608 7247
Password: 200019

Date: Wednesday, September 22, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #11 – due at 9:00 am (#10)
New Assignments Open: None
Supportive Reading: Chapter 3, Brock Biology of Microorganisms (16th Edition)
In-Person Meeting: None
Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, September 23, 2021
Assignments Due: Packback 4A: Single Question stemming from Lectures 11-12 due at 11:59PM CST.

Date: Friday, September 24, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #12 – due at 9:00 am (#11)
New Assignments Open: None

Supportive Reading: *Chapter 3, Brock Biology of Microorganisms (16th Edition)*

In-Person Meeting: None

Virtual Office Hours: Dr. Vanderpool 9:00-9:50am [Dr. Vanderpool Friday Virtual Office Hours]
Meeting ID: 965 608 7247
Password: 200019

Date: Saturday, September 25, 2021

Assignments Due: Packback 4B: Responses to two questions stemming from Lectures 11-12 due at 11:59PM CST

**WEEK 6**

Date: Monday, September 27, 2021

Assignments Due: Lecture Refresher Micro-Quiz on Lecture #13 – due at 9:00 am (#12)

New Assignments Open: None

Videos to Watch: Lecture 14: Parts and Processes – How Microbes Work – I: Photosynthesis

Supportive Reading: *Chapter 14, Brock Biology of Microorganisms (16th Edition)*

In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility

Virtual Office Hours: None

Date: Wednesday, September 29, 2021

Assignments Due: Lecture Refresher Micro-Quiz on Lecture #14 – due at 9:00 am (#13)

New Assignments Open: Homework #4 opens at 10:00 am, Lectures 15-18, Closes at 9:00 am on Monday, October 12, 2021 (Lon Capa)

Videos to Watch: Lecture 15: Parts and Processes – How Microbes Work – II: Stress Responses

Supportive Reading: None

In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility

Virtual Office Hours: [TA Zoom Office Hours]
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, September 30, 2021

Assignments Due: Packback 5A: Single Question stemming from Lectures 13-15 due at 11:59PM CST.

Date: Friday, October 1, 2021

Assignments Due: Lecture Refresher Micro-Quiz on Lecture #15 – due at 9:00 am (#14)
New Assignments Open: None
Videos to Watch: Lecture 16 Parts and Processes – How Microbes Work – III: Quorum Sensing
Supportive Reading: None
In-Person Meeting: None
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am Dr. Vanderpool Friday Virtual Office Hours
Meeting ID: 965 608 7247
Password: 200019

Date: Saturday, October 2, 2021
Assignments Due: Packback 5B: Responses to two questions stemming from Lectures 13-15 due at 11:59PM CST

WEEK 7
Date: Monday, October 4, 2021
Assignments Due:
1. Homework #3 CLOSES at 9:00 am
2. Lecture Refresher Micro-Quiz on Lecture #16 – due at 9:00 am (#15)
New Assignments Open: None
Videos to Watch: Lecture 17: Parts and Processes – How Microbes Work – I: Bacterial Development
Supportive Reading: None
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: None

Date: Wednesday, October 6, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #17 – due at 9:00 am (#16)
New Assignments Open: None
Videos to Watch: Lecture 18: Establishment of microbial communities – I: The Role of Evolution in Establishing Community Structure
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, October 7, 2021
Assignments Due: Packback 6A: Single Question stemming from Lectures 16-18 due at 11:59PM CST.
Date: Friday, October 8, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #18 – due at 9:00 am (#17)
New Assignments Open: None
Videos to Watch: Lecture 19: Establishment of microbial communities II: Rapid Change through Horizontal Gene Transfer
In-Person Meeting: Group 3 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am Dr. Vanderpool Friday Virtual Office Hours
Meeting ID: 965 608 7247
Password: 200019

Date: Saturday, October 9, 2021
Assignments Due: Packback 6B: Responses to two questions stemming from Lectures 16-18 due at 11:59PM CST

WEEK 8
Date: Monday, October 11, 2021
Assignments Due:
1. Homework #4 CLOSES at 9:00 am
2. Lecture Refresher Micro-Quiz on Lecture #19 – due at 9:00 am (#18)
New Assignments Open: None
Videos to Watch: Lecture 20: Establishment of microbial communities III: Unmasking the invisible majority through culture independent techniques.
In-Person Meeting: None
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am Dr. Vanderpool Friday Virtual Office Hours
Meeting ID: 965 608 7247
Password: 200019

Date: Wednesday, October 13, 2021
Assignments Due: Exam #2 Covers Lectures 11-20, LonCapa
New Assignments Open: None
Videos to Watch: None
Supportive Reading: None
Virtual Office Hours: Dr. Vanderpool 9:00-9:50am Dr. Vanderpool Friday Virtual Office Hours
Meeting ID: 965 608 7247
Password: 200019
Part 2: Dr. Blanke

Date: Friday, October 15, 2021
Assignments Due: None
New Assignments Open: Homework #5 opens at 10:00 am, Lectures 21-24, Closes at 9:00 am on Friday, October 30, 2021 (Lon Capa)
Videos to Watch: Lecture 21: Establishment of microbial communities IV: Characterizing the forces that help define and shape the diversity of microbial community structures
In-Person Meeting: None
Virtual Office Hours: Dr. Blanke 9:00-9:50am Dr. Blanke Friday Virtual Office Hours
Meeting ID: 561 477 4714
Password: 915830

WEEK 9
Date: Monday, October 18, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #21 – due at 9:00 am (#19)
New Assignments Open: None
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: None

Date: Wednesday, October 20 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #22 – due at 9:00 am (#20)
New Assignments Open: None
Videos to Watch: Lecture 23: Establishment of microbial communities VI: The human gut microbiome in human health and disease – Part A
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, October 21, 2021
Assignments Due: Packback 7A: Single Question stemming from Lectures 21-22 due at 11:59 CST.
Date: Friday, October 22, 2021

Assignments Due: Lecture Refresher Micro-Quiz on Lecture #23 – due at 9:00 am (#21)
New Assignments Open: None
In-Person Meeting: None
Virtual Office Hours: Dr. Blanke 9:00-9:50am Dr. Blanke Friday Virtual Office Hours
Meeting ID: 561 477 4714
Password: 915830

Date: Saturday, October 23, 2021

Assignments Due: Packback 7B: Responses to two questions stemming from Lectures 21-23 due at 11:59 CST

WEEK 10
Date: Monday, October 25, 2021

Assignments Due: Lecture Refresher Micro-Quiz on Lecture #24 – due at 9:00 am (#22)
New Assignments Open: Homework #6 opens at 10:00 am, Lectures 25-28, Closes on 10:00 am Friday, November 6, 2021 (Lon Capa)
Videos to Watch: Lecture 25: Pathogenic Microbe-Host Interactions I: Introduction to infectious diseases and microbial pathogenesis: The good, the bad, and the ugly…
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: None

Date: Wednesday, October 27 2021

Assignments Due: Lecture Refresher Micro-Quiz on Lecture #25 – due at 9:00 am (#23)
New Assignments Open: None
Videos to Watch: Lecture 26: Pathogenic Microbe-Host Interactions-II: Host barriers to microbial interactions…Barriers, fortresses, moats, artillery
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, October 28, 2021

Assignments Due: Packback 8A: Single Question stemming from Lectures 24-26 due at 11:59 CST.

Date: Friday, October 29, 2021
Assignments Due:
1. Homework #5 CLOSES at 9:00 am
2. Lecture Refresher Micro-Quiz on Lecture #26 – due at 9:00 am (#24)

New Assignments Open: None

Videos to Watch: Lecture 27: Pathogenic Microbe-Host Interactions-III: Host innate defenses to pathogenic microbes…. sentinels, supply lines, and cluster weapons.

In-Person Meeting: None

Virtual Office Hours: Dr. Blanke 9:00-9:50am [Dr. Blanke Friday Virtual Office Hours]
Meeting ID: 561 477 4714
Password: 915830

Date: Saturday, October 30, 2021
Assignments Due: Packback 8B: Responses to two questions stemming from Lectures 24-26 due at 11:59 CST.

WEEK 11
Date: Monday, November 1, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #27 – due at 9:00 am (#25)
New Assignments Open: None
Videos to Watch: Lecture 28: Pathogenic Microbe-Host Interactions-IV: Host adaptive defenses to pathogenic microbes…artificial intelligence, machine learning, smart devices-Part A
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility

Virtual Office Hours: None

Date: Wednesday, November 3, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #28 – due at 9:00 am (#26)
New Assignments Open: None
Videos to Watch: Lecture 29: Pathogenic Microbe-Host Interactions-V: Host adaptive defenses to pathogenic microbes… artificial intelligence, machine learning, smart devices-Part B
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility

Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, November 4, 2021
Assignments Due: Packback 9A: Single Question stemming from Lectures 27-29 due at 11:59 CST.
**Date:** Friday, November 5, 2021  

**Assignments Due:**  
1. Homework #6 CLOSES at 10:00 am  
2. Lecture Refresher Micro-Quiz on Lecture #29 – due at 9:00 am (#27)  

**New Assignments Open:** None  

**Videos to Watch:** Lecture 30: Pathogenic Microbe-Host Interactions-VI: Koch’s Postulates - How to detect and assign a microbe as the causative agent of infectious disease.  

**In-Person Meeting:** None  

**Virtual Office Hours:** Dr. Blanke 9:00-9:50am [Dr. Blanke Friday Virtual Office Hours]  
Meeting ID: 561 477 4714  
Password: 915830  

**Date:** Saturday, November 6, 2021  

**Assignments Due:** Packback 9B: Responses to two questions stemming from Lectures 27-29 due at 11:59 CST  

**WEEK 12**  
**Date:** Monday, November 8, 2021  

**Assignments Due:** Exam #3 Covering Lectures 21-30  

**New Assignments Open:** None  

**Videos to Watch:** None  

**In-Person Meeting:** None  

**Virtual Office Hours:** Dr. Blanke 9:00-9:50am [Dr. Blanke Friday Virtual Office Hours]  
Meeting ID: 561 477 4714  
Password: 915830  

**Date:** Wednesday, November 10, 2021  

**Assignments Due:** None  

**New Assignments Open:** Homework #7 opens at 10:00 am, Lectures 31-34, Due at 9:00 am on Wednesday, December 2, 2021 (Lon Capa)  

**Videos to Watch:** Lecture 31: Pathogenic Microbe-Host Interactions-VII: Studying the Virulence of Pathogenic Microbes – How to Study Microbial Pathogenesis  

**In-Person Meeting:** None  

**Virtual Office Hours:** TA Zoom Office Hours  
Meeting ID: 881 9202 4265  
Password: 300TA  

**Date:** Thursday, November 11, 2021
**Assignments Due:** Packback 10A: Single Question stemming from Lectures 30-31 due at 11:59 CST.

**Date:** Friday, November 12, 2021

**Assignments Due:** Lecture Refresher Micro-Quiz on Lecture #31 – due at 9:00 am (#28)

**New Assignments Open:** None

**Videos to Watch:** Lecture 32: Pathogenic Microbe-Host Interactions-VIII: Establishing an Infection within the Host – Immune Evasion and Colonization and Transmission – Part A.

**In-Person Meeting:** None

**Virtual Office Hours:** Dr. Blanke 9:00-9:50am [TA Zoom Office Hours](#)
Meeting ID: 881 9202 4265
Password: 300TA

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**Assignments Due:** Packback 10B: Responses to two questions stemming from Lectures 30-31 due at 11:59 CST

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**WEEK 13**

**Date:** Monday, November 15, 2021

**Assignments Due:** Lecture Refresher Micro-Quiz on Lecture #32 – due at 9:00 am (#29)

**New Assignments Open:** None

**Videos to Watch:** Lecture 33: Pathogenic Microbe-Host Interactions- IX: Establishing an Infection within the Host – Immune Evasion, Colonization, and Transmission – Part B.

**In-Person Meeting:** Group 1 (only) in 3025 Campus Instructional Facility

**Virtual Office Hours:** None

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**Date:** Wednesday, November 17, 2021

**Assignments Due:** Lecture Refresher Micro-Quiz on Lecture #33 – due at 9:00 am (#30)

**New Assignments Open:** None

**Videos to Watch:** Lecture 34: Pathogenic Microbe-Host Interactions - X: Intracellular Invasion & Survival.

**In-Person Meeting:** Group 2 (only) in 3025 Campus Instructional Facility

**Virtual Office Hours:** [TA Zoom Office Hours](#)
Meeting ID: 881 9202 4265
Password: 300TA
Date: Thursday, November 18, 2021
Assignments Due: Packback 11A: Single Question stemming from Lectures 32-34 due at 11:59 CST.

Date: Friday, November 19, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #34 – due at 9:00 am (#31)
New Assignments Open: Homework #8 opens at 10:00 am, Lectures 35-38, Closes at 9:00 am on Monday, December 7, 2021 (Lon Capa)
Videos to Watch: Lecture 35: Pathogenic Microbe-Host Interactions- XI: Remodeling the Host into a Suitable Infection Microenvironment – the Amazing World of Bacterial Toxins.
In-Person Meeting: None
Virtual Office Hours: Dr. Blanke 9:00-9:50am Dr. Blanke Friday Virtual Office Hours
Meeting ID: 561 477 4714
Password: 915830

Date: Saturday, November 20, 2021
Assignments Due: Packback 11B: Responses to two questions stemming from Lectures 32-34 due at 11:59 CST

WEEK 14
THANKSGIVING BREAK,
Monday, November 22, 2021 – Friday, November 26, 2021

WEEK 15
Date: Monday, November 29, 2021
Assignments Due: None
New Assignments Open: None
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: None

Date: Wednesday, December 1, 2021
Assignments Due:
1. Homework #7 CLOSES at 10:00 am
2. Lecture Refresher Micro-Quiz on Lecture #36 – due at 9:00 am (#32)
New Assignments Open: None
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility

Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, December 2, 2021
Assignments Due: Packback 12A: Single Question stemming from Lectures 35-37 due at 11:59 CST.

Date: Friday, December 3, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #37 – due at 9:00 am (#33)
New Assignments Open: None
Videos to Watch: Lecture 38: Micromodule B: Eukaryotic Pathogens: Wayward Fungi, and a Hypothesis.
In-Person Meeting: None
Virtual Office Hours: Dr. Blanke 9:00-9:50am Dr. Blanke Friday Virtual Office Hours
Meeting ID: 561 477 4714
Password: 915830

Date: Saturday, December 4, 2021
Assignments Due: Packback 12B: Responses to two questions stemming from Lectures 35-37 due at 11:59 CST

Week 16
Date: Monday, December 6, 2021
Assignments Due:
1. Homework #8 CLOSES at 9:00 am
2. Lecture Refresher Micro-Quiz on Lecture #38 – due at 9:00 am (#34)
New Assignments Open: None
Videos to Watch: Lecture 39: Micromodule C: Controlling Bacterial Infections…or are we?: The Life and Death Business of Generating Effective Antimicrobials in the Face of Antimicrobial Resistance.
In-Person Meeting: Group 1 (only) in 3025 Campus Instructional Facility
Virtual Office Hours: None

Date: Wednesday, December 8, 2021
Assignments Due: Lecture Refresher Micro-Quiz on Lecture #39 – due at 9:00 am (#35)
New Assignments Open: None
Videos to Watch: Lecture 40: Micromodule D: Vaccines as the Real Game Changer: Next Generation Strategies to Prevent Microbial Diseases in Humans.
In-Person Meeting: Group 2 (only) in 3025 Campus Instructional Facility

Virtual Office Hours: TA Zoom Office Hours
Meeting ID: 881 9202 4265
Password: 300TA

Date: Thursday, December 9, 2021
    Reading Day

Week 17
    Wednesday, December 15, 2021 7:00-10:00 pm (may change)
    Exam #4 Covering Lectures 31-40