

BISC 210
Principles of Microbiology
Spring 2020; 4 Credits

Instructor: Clinton Copp, M.S./ Shoemaker Hall 311
(662) 915-2311 / ccopp@olemiss.edu

Office hours: **Tues/Thurs:** 8am-12pm
or by appointment (Shoemaker Hall Rm. 311)

Lecture: MWF 11am-11:50am (Music Building: Nutt Auditorium 123)

Lab: Days/Times Vary: (Shoemaker Hall Rm. 527)

Course Description:

Bisc 210 is an introductory course in microbiology emphasizing human interactions with microbes, including disease, food, sanitation, and biotechnology. The course is designed for students in health-related studies such as nursing & nutrition. It applies to the laboratory science requirement of the core curriculum, and may not be counted toward a major or minor credit in the Department of Biology. Students will earn 3 credits for the lecture portion of the course, and 1 credit for the lab portion, although only one aggregate grade is assigned.

Importance of Course:

Microorganisms, which include bacteria, viruses, fungi, and other microscopic organisms, are everywhere. They can have strong beneficial or detrimental effects on humans and on our environment. This course will not only give students a foundation in the previous scientific discoveries about microbes, but also will prepare you to interpret the new scientific discoveries of the future. Science is a dynamic process, and an understanding of how science works is fundamental to understanding microbiology or any other branch of biology.

Course Learning Outcomes:

By the end of the semester, students should be able to:

- Compare and contrast the structure and function of the major taxonomic groups of microbes, including both eukaryotes and prokaryotes
- Use and understand key techniques for studying, culturing, and controlling the growth of microbes
- Understand microbial genetics and the use of microbes in biotechnology
- Understand principles of disease and epidemiology, and the mechanisms through which microbes are involved in diseases
- Describe key roles that microbes play in our environment and in food production

Required Materials:

- **Textbook:** Microbiology Basic and Clinical Principles-- Lourdes Norman-McKay WITH online Mastering program) →
- A. (Mastering Online Program + E-book) → ISBN: 9781323905142
- **Laboratory Manual (Hard Copy):** Laboratory Manual for Microbiology (3rd Edition), by J. Hoeksema & C. Copp. Kendall Hunt Publishing Company, 2012. (ISBN: 9781524967581)
 - <https://he.kendallhunt.com/hoeksema-copp>
- **Clicker:** ResponseCard QT or QT2 from Turning Technologies
- Turning Technologies Clicker Subscription

Recommended Materials:

- *Inexpensive lab coat (optional)*
- *Microbiology (Quick Study Academic): ISBN: 9781423233190*

Course Policies:

Attendance Policy:

Attendance is mandatory. Arrive to lecture on time, scan your ID, and participate during class with your TT Response Card to earn participation points (see grading section). Lecture material will not be available any other way than from lecture presentation. If you must miss a given lecture, arrange to get notes from a classmate.

Electronic Devices (Computers/Tablets & Cell Phones):

Computers/Tablets: If you would like to use a laptop or tablet to take notes then **YOU must** contact me beforehand. If you are caught using your computer/tablet for anything other than notes you will lose the opportunity of using your computer/tablet for the remainder of the semester in addition to losing 25 points off of your total grade. **All students who wish to use their laptops/tablets must sit in the designated area.**

Cell Phones: If you are caught with your cell phone out during class you will lose 15 points from your total points for the semester **PER OFFENSE!** This is something I take VERY seriously and you do not want to lose out on points during the semester for using your phone during class.

PHOTOGRAPHY POLICY: Taking photographs in class is not allowed. Do not take pictures of class content with any machine (i.e. phone, tablet, camera, etc). Taking photographs of exam

questions or clicker questions is NOT allowed. Doing so constitutes academic misconduct and will not be tolerated.

TT Response Card “Clicker”:

You must:

1. Register your TT Response Card & license before classes begin
2. Bring your Response Card to every class including exams
3. Use only YOUR registered Response Card. **Using another students Response Card is considered cheating. Academic Misconduct guidelines apply to either such violation.**
4. There is a file under information on how to register.

Blackboard:

You have been assigned a Web ID and an associated password for access to online resources. The course management system used here is: Blackboard (<https://blackboard.olemiss.edu/>). I will be posting grades, announcements, and other important course information on Blackboard. **You will need to check your Blackboard account for this course at least once a day to prevent missing important messages.**

Absences:

It is a student’s responsibility to attend class. You should scan YOUR ID card as soon as you enter the classroom. The scanner will be open 15minutes before class until 15minutes into class (30min window). Missing my class will not only forfeit the days participation points but will miss out on class notes. Missing class for any reason will simply mean that you miss out on the participation points for that day (no make-up points will be allowed). This also means you do not have to explain your absence nor ask to be excused from class.

Please note that if there is a quiz/exam that day and you miss class without an excuse you will not be permitted to make up that quiz/exam. Students who do not attend class typically do not do well in my course. I strongly suggest that you attend class regularly as your grade directly correlates with your attendance.

E-mail:

You are responsible for managing your olemiss.edu e-mail account for functionality and checking it every day, so that you can receive course announcements from instructors in a timely fashion. When communicating with your instructors (and other colleagues in professional settings) by e-mail, professionalism is essential. Towards that end, your e-mails should always contain:

1. A greeting of some kind, such as “Mr. Copp,” or “Dear Ms. Smith,” (not simply “Hey”)
 - a. “Hey” has no place in a professional e-mail so please do not use it when sending me an e-mail. I simply will not respond.

2. Make sure to put your Name/Course/Section in the e-mail subject line
 - a. If you cannot remember your section then please put the day/time the class meets
3. Content that is clear, concise, and polite.
4. A signature identifying yourself, such “Sincerely, John Doe” or “best wishes, Sally Smith” or even simply “John Doe”

If you can't take the time to type a professional, courteous e-mail with your phone or blackberry or other PDA, then please find yourself a computer with a full keyboard before e-mailing me or any other professional colleague.

Description of Assessment:

Exams:

Exams are based on the information from the chapters covered in the book as well as my lecture notes and will be taken on your clicker. You will need to take comprehensive notes in order to do well in my course. The exams will consist of multiple-choice, true/false, matching, and short answer questions for a total of 100 points. The day of each exam you must bring: **your student ID, calculator, and clicker**. We use **clickers** for exams and if you do not have your clicker for the exam you will be permitted to take the exam but will lose 15 points automatically

Cell phones, iPads, tablets, iPods, headphones, or any other electronic device is **PROHIBITED**. If you are caught with any electronic device during an exam you will automatically receive a zero (0) for that exam and will be reported to the academic misconduct board. Additionally, no hoods may be worn during exams and hats must be turned backwards or removed.

You will only be allowed to make up an exam with an excused absence (Doctors note, court papers, school event paperwork etc...) that must be turned in to me within 3 days of missing the exam. Make ups will be taken at a time determine by me.

FINAL EXAM: The final exam will be 50 questions and is cumulative. Additionally, final exams must be taken at the scheduled time and date. There are only two exceptions to this rule: 1) Three (3) exams in one day (you may move the noon exam)/ 2) Documented medical emergency.

NOTE: During the examination period, exams will NOT be passed out to student(s) UNDER ANY CIRCUMSTANCES after 15 minutes have elapsed from the start of the exam. University policy states, “Tardiness in excess of 15 minutes forfeits a student’s right to an examination.” The format of makeup exams is at the discretion of the instructor.

Participation points:

Participation points are earned by responding to clicker questions via TT Response Card asked during lecture. The number of questions asked per class greatly varies depending on topic,

how far we get into the material, etc... This means that you will want to come to every class as the number of questions that day can vary from zero to ten. A correct answer is worth one (1) point while an incorrect answer is worth half (0.5) point. Over the course of the semester there will be at minimum 65 clicker questions (1pt each) for a total of 65 participation points. Any questions/points earned over 65 will be considered bonus points.

For example: At the end of the semester you have responded and answered correctly 71 questions. This means that you have earned the full 65 participation points plus 6 extra bonus points to be added to your score.

Missed participation points cannot be made up under any circumstances. I WILL NOT accept paper copies with answers to clicker questions (only exception is if the computer is not working).

***It is your responsibility to come to class on time with a functioning clicker every day, and to make sure that it contains your own student ID number. **No participation credit will be given for malfunctioning clickers, forgotten clickers, clickers with dead batteries, or clickers accidentally containing the wrong student ID number, so please do not ask.**

Quizzes:

There will be 5 quizzes throughout the semester. Each quiz will be worth 10 points for a total of 50 points (5 quizzes x 10 points). The quizzes will cover any/all material we have covered up to that point. All quizzes are given via “clickers”, no paper copies will be accepted. You will only allowed to make up a quiz with an excused absence.

Homework:

There will be 5 homework assignments throughout the semester. Each assignment is worth 20 points and will be assigned via the Mastering Microbiology program that is required for this course.

Exam Make-up information:

Additionally, you must be aware that there are very few valid reasons for missing an exam. Valid reasons include a medical or family **emergency** or a University-sanctioned event (you must provide formal documentation **PRIOR** to missing an exam). The format of all make-up exams will consist of mainly short answer questions.

Make-up Policies:

- 1) It is the student’s responsibility to contact me in the case of an absence.
- 2) Excuses must be turned in within 3 days of absence
- 3) If excuse is not turned in within 3 days of absence student **WILL NOT** be able to make up the assignment and will receive a score of a zero (0).
- 4) The student will have fourteen (14) days from missed exam/quiz to make up the missed work. If the work is not made up within those fourteen (14) days then the student will receive a zero.

Any excuses must be given to me within three (3) days after the missed exam or quiz. I must receive a copy to keep for my records. Failure to do so results in a zero (0) for that exam/quiz.

Grading/Points Breakdown:

Lecture	
Exam 1	100
Exam 2	100
Exam 3	100
Final Exam	100
Participation points	65
Quizzes (5 x 10pts)	50
Lab	150
Homework (5 x 20pts)	100
Total	765

Grading scale: Below shows how many points you need for each grade:

688- 765 = A	(90-100%)
674 - 687 = A-	(88-89.99%)
651 - 673 = B+	(85-87.99%)
612 - 650 = B	(80-84.99%)
597 - 611 = B-	(78-79.99%)
574 - 596 = C+	(75-77.99%)
536 - 573= C	(70-74.99%)
521 - 535 = C-	(68-69.99%)
459 - 520 = D	(60-67.99%)
0 - 458 = F	(0-59.99%)

Note: This scale is non-negotiable. There will be NO extra credit points. All students will be treated equally and fairly, and all grades will be calculated in the same way, regardless of extenuating circumstances or any other reason(s) not related to your actual performance in the course.

Academic Misconduct:

Academic dishonesty or misconduct of any kind is unacceptable and will not be tolerated. Academic misconduct and the procedure for handling misconduct are described in the University of Mississippi Policy Code ACA.AR.600.001 (reproduced as Section II of the M-Book). In this course, the most tempting for of misconduct is to send your ID Card and TT Response Card with another student to earn your participation points for you; doing so will result in the loss of all participation points for the semester for all students involved and perhaps expulsion from the course.

The following misuses of clickers will be treated as serious instances of academic misconduct (i.e. cheating):

- Using a clicker that contains another student's ID number during lecture
- Allowing another student to use a clicker containing your student ID number during a quiz or exam
- Using more than one clicker during a lecture quiz or exam, or
- Attempting to enter clicker answers from outside the lecture room.
- Scanning another student's ID

You are required to bring a photo ID with you to class each day (including exam days), to facilitate enforcement of ethical use of clickers by occasional random manual attendance checks. **If you cheat with your clicker in any of the ways listed above, you will automatically FAIL the course, and an academic misconduct report will be added to your university file.**

NOTE I will have a teaching assistant sitting in on lecture in order to enforce these rules (including the electronic device rules). The teaching assistant has the ability to take a student's clicker due to any infraction of the rules and in turn the student who will lose points accordingly.

Disability Access and Inclusion: The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation, or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, timed exams and in-class assignments, difficulty with the acquisition of lecture content, inaccessible web content, and the use of non-captioned or non-transcribed video and audio files. If you are approved through SDS, you must log in to your Rebel Access portal at <https://sds.olemiss.edu> to request approved accommodations. If you are NOT approved through SDS, you must contact Student Disability Services at [662-915-7128](tel:662-915-7128) so the office can: 1. determine your eligibility for accommodations, 2. disseminate to your instructors a Faculty Notification Letter, 3. facilitate the removal of barriers, and 4. ensure you have equal access to the same opportunities for success that are available to all students."

UNIVERSITY WIDE ATTENDANCE POLICY:

Verification of Class Attendance and Class Attendance Policy: Beginning this fall, the University requires instructors to verify the attendance/participation of students in **ALL** courses

within the first two weeks of the semesters. This requirement is to bring the institution into compliance with US Department of Education requirements. The verification of student attendance/participation will occur during the first two weeks. Students who have not attended the course and attendance has not been verified will automatically be dropped from that course.

Inclement Weather:

In the event that the University cancels classes due to inclement weather, we will adjust the schedule accordingly by shifting our topic or event (e.g., exam) to the next class period. Please check Blackboard for announcements if this situation arises.