

**Introductory Microbiology**  
**MIBO 3500 Fall 2019**  
**Section #24921**

**INSTRUCTOR:**

Instructor	Dr. Francine Scott	Phone	(706) 542-0947
Office	327B Biological Sciences	E-mail	francine.scott@uga.edu
Office Hours	Drop-in Mon, Wed, Fri 10-11am *or by appointment on Tues/Thurs	Credit Hours	3 HOURS

**TEACHING ASSISTANTS:**

Teaching Assistant	Tao Wang	E-mail	wangtao@uga.edu
Group	1		
Office Hours	Drop-in Tues 8-9am, Fri 12:10-1:10pm (BIOSCI 541)		

Teaching Assistant	Sophia Weerth	Email	sophia.weerth@uga.edu
Group	2		
Office Hours	Drop-in Tues 8-9am (Coverdell Rm. 230), Fri 12:10-1:10pm (BIOSCI 327)		

**COURSE DESCRIPTION:**

MIBO 3500 provides an introduction to microorganisms with a special emphasis on bacteria, their structure, function, diversity, and importance to man.

Pre or Corequisite: (CHEM 221I or CHEM 231IH or CHEM 241I) and (CHEM 221IL or CHEM 231IL or CHEM 241IL) and BIOL 1107 or BIOL 1107E or BIOL 2107H

**TEXTBOOK (RECOMMENDED NOT REQUIRED):**

Microbiology An Evolving Science, 4<sup>th</sup> edition. 2017 Slonczewski and Foster. W.W. Norton and Company. ISBN9780393602340

**METHODS OF INSTRUCTION:**

Lectures will be comprised of a combination of PowerPoint presentations, group-discussions, and case-study activities. PowerPoint presentations and other handouts will be available on eLC for students to download.

**EMAIL POLICY:**

Students are divided into TA groups (listed in eLC gradebook). Each group is assigned a course TA who will be their primary email contact. Students should address all course questions first to their TA. However, concerns regarding missed assignments, disability accommodations, or problems accessing quizzes should first be directed to Dr. Scott. All emails will receive a response within 24 hours Mon-Fri.

**ATTENDANCE POLICY:**

PowerPoint slides and handouts contain an outline and not a complete description of a class discussion, therefore students should attend all lectures regularly. Students who have a legitimate and documented excuse for an absence (illness, family emergency, etc.) should contact Dr. Scott as soon as possible to go over missed material and make up any missed assignments. If a student is late to class on an exam day the exam will be considered late (ie. a grade of zero). Exceptions for late exams can be considered for excused absences and arriving to class late but *before* another other student has turned in their exam and left the room. All exams

must be turned in promptly when the class period is over or they are considered late (ie. a grade of zero) with exceptions for DRC extended time accommodations.

### **STUDENTS WITH DISABILITIES:**

Students with disabilities who believe that they need accommodations in this course are encouraged to contact the Disabilities Resource Center as soon as possible to ensure such accommodations are implemented in a timely fashion.

Disability Resource Center: 114 Clark Howell Hall  
(voice) (706) 542-8719  
(fax) (706) 542-7719  
(tty) (706) 542-8778

### **GRADING SCALE AND EVALUATION:**

#### **eLC quizzes:**

There will be 6 online quizzes each worth 20 points. Quizzes are “closed note” and consist of 10 multiple choice/true-false questions worth 2 pts each. Quizzes are timed at 10 minutes. Each quiz may be attempted twice with the higher of the two scores being recorded in the gradebook. Questions come from eLC question bank so exact combination of questions on a second attempt may not be the same as first attempt. Quizzes are due at 11:30pm on indicated due date and will open at least two days ahead of time. The lowest of these 6 scores will be dropped.

#### **Exams:**

There will be 3 in-class exams and 1 in-class cumulative final exam each worth 100 points. The lowest of these four exam scores will be dropped. Thus, if a student is satisfied with their course grade prior to taking the final exam they may choose to not take the final. Exams may cover any material discussed in class (including case studies and Packback material discussed in class).

#### **Case Studies:**

Students will work in groups (or individually) outside of class to analyze 4 pieces of relevant literature each worth 25 points. Completed case studies will be due and discussed as a class on indicated discussion day. No case study scores will be dropped.

#### **Discussion Questions:**

There will be 6 in-class discussion questions that will be given unannounced throughout the semester. Each is worth 10 points. These questions are “open-note” and may be completed as a group. They may cover any topic that has been discussed in class since previous discussion question. The lowest of these six scores will be dropped.

#### **Packback Curiosity Questions:**

Students will post curiosity questions and respond to at least two questions from their peers on the indicated weeks (with a due time of 11:30pm). There will be 10 of these assignments each worth 5 points. Packback questions are due on Wednesdays (PBQ) and responses due that Friday (PBR). No Packback scores will be dropped. Material from questions/responses highlighted in class will be included on quizzes and exams.

*Students will start the course with full credit for Packback participation. Failure to upload a unique question and/or responses will result in that full assignment points being deducted. That is; if any portion of the assignment is incomplete or late the score for that entire assignment will be 0/5points. Restating another students question/response will also result in the full assignment points being deducted.*

**Points possible:**

Highest 3 exam scores: 3 at 100 pts. each	= 300 pts
Case Studies: 4 at 25 pts. each	= 100 pts
Highest 5 quiz scores: 5 at 20 pts. each	= 100 pts
Highest 5 discuss.ques. scores: 5 at 10 pts. each	= 50 pts
<u>Packback questions and responses: 10 at 5pts each</u>	<u>= 50 pts</u>
<b>Total Points</b>	<b>600 pts</b>

**Letter Grades:**

A = 93.0 - 100%	A- = 90.0 -92.9%	B+ = 87.0-89.9%	
B = 83.0-86.9%	B- = 80.0-82.9%	C+ = 77.0-79.9%	
C = 73.0-76.9%	C- = 70.0-72.9%	D = 50.01-69.9%	F = ≤ 50%

\*Letter grades will not be rounded

Description of Letter Grades: <http://www.reg.uga.edu/grades>

Grade	Points	Description
A	4.0	Excellent
A-	3.7	Excellent
B+	3.3	Good
B	3.0	Good
B-	2.7	Good
C+	2.3	Satisfactory
C	2.0	Satisfactory
C-	1.7	Satisfactory C- will not satisfy requirements that require a C (2.0) or better
D	1.0	Passing
F	0.0	Failure

**Extra Credit:** The decision to offer extra credit is at the discretion of course instructor. If extra credit is offered any opportunity to earn extra points will be fairly offered to all students in the course. Individual requests for extra credit and requests for extra credit after final day of instruction will not be considered.

**Late Policy:** Any assignment not received when it is due will be recorded as a zero (with the exception of reasons related to an excused absence).

**Regrade Policy:** Any student may submit a request for a regrade of an assignment within one week of assignment being available for review. These exact timelines will be announced on eLC. Regrade request forms will be available on eLC for students to download. Students may need to pick-up/review their graded assignment with their TA before a regrade request form may be submitted.

## LETTERS OF RECOMMENDATION:

Strong letters of recommendation come from referring students who we know well. Students who are considering requesting letters of recommendation should meet regularly with Dr. Scott and their TA throughout the entire semester or in the several months preceding a letter request. Decisions on letters of recommendation take into consideration a student's overall course grade, how well we know the student, and number of students requesting letters.

**\*\***This syllabus is intended as an outline for the course. Some deviations may be necessary. If any changes occur students will be notified immediately.

## SCHEDULE:

DATE	TOPIC	TEXTBOOK CHAPTER
Aug 14	Introduction to Course	N/A
Aug 16	Microbial Life	1
Aug 19	Observing The Microbial Cell	2
Aug 21	Cell Structure & Function, PBQ1	3
Aug 23	Cell Structure & Function, PBR1	3
Aug 26	Bacterial Culture, Growth, & Development	4
Aug 28	Bacterial Culture, Growth, & Development, Quiz 1	4
Aug 30	Case Study #1	N/A
Sept 2	LABOR DAY-NO CLASS	N/A
Sept 4	Environmental Influences & Control of Microbial Growth, PBQ2	5
Sept 6	Energetics & Catabolism, PBR2	13
Sept 9	Energetics & Catabolism, Quiz 2	13
Sept 11	Electron Flow in Organotrophy, Lithotrophy, & Phototrophy	14
Sept 13	Exam 1	Chapters 1-5, 13-14
Sept 16	Genomes & Chromosomes	7
Sept 18	Genomes & Chromosomes, PBQ3	7
Sept 20	Gene Transfer, Mutations, & Genome Evolution, PBR3	9
Sept 23	Gene Transfer, Mutations, & Genome Evolution, Quiz 3	9
Sept 25	Molecular Regulation, PBQ4	10
Sept 27	Molecular Regulation, PBR4	10
Sept 30	Case Study #2	N/A
Oct 2	Bacterial Diversity, PBQ5	18
Oct 4	Bacterial Diversity, PBR5	18
Oct 7	Antibacterial Therapy, Quiz 4	27
Oct 9	Antibacterial Therapy	27
Oct 11	Exam 2	Chapters 7, 9-10, 18, 27

DATE	TOPIC	TEXTBOOK CHAPTER
Oct 14	Eukaryotic and Archaeal Diversity	19, 20
Oct 16	Viruses, PBQ6	6
Oct 18	Viruses, PBR6	6
Oct 21	Viruses, Withdrawal Deadline	6
Oct 23	Antiviral Therapy, PBQ7	27
Oct 25	Case Study #3, PBR7	N/A
Oct 28	Microbial Ecology	21
Oct 30	Microbial Ecology	21
Nov 1	Fall Break-No Classes	N/A
Nov 4	Food and Industrial Microbiology, Quiz 5	16
Nov 6	Food and Industrial Microbiology, PBQ8	16
Nov 8	Human Microbiota & Innate Immunity, PBR8	23
Nov 11	The Adaptive Immune Response	24
Nov 13	Microbial Pathogenesis, PBQ9	25
Nov 15	Exam 3, PBR9	6, 16, 19, 20, 21, 23-25, 27
Nov 18	Microbial Diseases (Bacterial)	TBA
Nov 20	Microbial Diseases (Fungal), PBQ10	TBA
Nov 22	Case Study #4, Quiz 6, PBR10	TBA
Nov 25	Microbial Diseases (Viral)	TBA
Nov 27	Thanksgiving Holiday-No classes	N/A
Nov 29	Thanksgiving Holiday-No classes	N/A
Dec 2	Microbes and Cancer	TBA
Dec 4	Review for Final, Last Day of Classes	Cumulative
Dec 6	Final Exam 12-3pm	Cumulative

#### ACADEMIC INTEGRITY:

Excerpt from A Culture of Honesty: “No student shall perform, attempt to perform, or assist another in performing any act of dishonesty on academic work to be submitted for academic credit or advancement. A student does not have to intend to violate the honesty policy to be found in violation. For example, plagiarism, intended or unintended, is a violation of this policy” Additionally, students must agree that “I will be academically honest in all of my academic work and will not tolerate the dishonest of others.”

A complete description of academic dishonesty may be found at <http://www.uga.edu/honesty> and in the student honor code. If a student is found in violation of the academic integrity policy the University’s policy and procedures for handling cases of suspected dishonesty can be found at <http://www.uga.edu/ovpi>

#### FINAL EXAMINATION:

Cumulative final exam is scheduled for Friday Dec. 6<sup>th</sup>, 12-3pm