Introductory Microbiology Laboratory I
MIBO 3500L
Spring 2022

INSTRUCTOR:

Instructor	Dr. Francine Scott	**Phone**	(706) 542-0947
Office	327B Biological Sciences	**E-mail**	francine.scott@uga.edu
Email Hours	Will respond to email within 24 hours Mon-Fri	**Credit Hours**	1 HOUR (*2 hours lab per week*)

TEACHING ASSISTANTS:

Teaching Assistant-1	Hayden Lippelman	**Email**	hayden.lippelman@uga.edu
Email Hours	Will respond to email within 24 hours Mon-Fri	**Sections**	#56945, 61937, 61938

Teaching Assistant-2	Chris Moxley	**Email**	wcm79685@uga.edu
Email Hours	Will respond to email within 24 hours Mon-Fri	**Sections**	#61936, 56948, 56950

Teaching Assistant-3	Joseph Nobel	**Email**	jtn84556@uga.edu
Email Hours	Will respond to email within 24 hours Mon-Fri	**Sections**	#56943, 56946, 58651

Teaching Assistant-4	Tao Wang	**Email**	wangtao@uga.edu
Email Hours	Will respond to email within 24 hours Mon-Fri	**Sections**	#58650, 58652, 56949

COURSE DESCRIPTION:
Basic microbiology laboratory techniques to include aseptic technique, microscopy, use of media, analysis of morphological and biochemical properties, and experimental design.

Prerequisite: [(BIOL 1103 or BIOL 1103E or BIOL 1103H) and BIOL 1103L] or [(BIOL 1107 or BIOL 1107E or BIOL 1107H) and BIOL 1107L]

Prerequisite or Corequisite: MIBO 3500 or MIBO3500E

REQUIRED TEXT:
Microbiology 3500L Lab Manual is available for purchase through eLC page. Cost is $30 (credit card). This manual is required for each student as the manual serves as a personal lab record of experimental data.

COURSE WEB PAGE:
Schedule changes and updates, as well as grades and study guides, can be found on the MIBO 3500L course eLC page. Students should check eLC regularly for any course updates or changes.

LAB STRUCTURE:
Each lab section is fully in-person instruction with required attendance.

ATTENDANCE AND MISSED ASSIGNMENTS:
Any student who cannot attend their lab session should contact their TA immediately for approval of absence. TAs will approve all reasonable reasons for class absence. TA will request documentation of reason for absence if graded work is missed. **Unapproved absences will result in 5pts per instance being deducted from final laboratory grade. Missed assignments can be made-up with permission of the TA (documentation of reason for absence required).** Any *unresolved* grade concerns regarding absences or missed work should be directed to F.Scott.

**Students who need to miss more than two consecutive lab periods should contact F.Scott for approval of absences.*

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

ACADEMIC INTEGRITY:

All graded assignments and lab notebooks are to be the work of the **individual student (in their own words)**. **Failure to follow this guideline will be considered academic dishonesty.**

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

GRADED ASSIGNMENTS:

Exams: There are 2 exams (lab practicals) for this course, each worth 100 points. Exams may consist of physical performance of lab techniques and/or written questions, multiple choice, matching, true-false or a combination of question types.

Lab Reports: There will be 4 experiments in which students will be asked to detail their experimental purpose, hypothesis, controls, variables, procedures, figures, and conclusions in lab report. Each lab report is worth 20 points and will be submitted online.

Lab Concept Checks: There will be 5 concept checks worth 10 points each. The concept check may cover any material from that lab period and/or material/techniques covered since the last concept check. Concept checks may consist of physical performance of lab techniques and/or written questions, multiple choice, matching, true-false or a combination of question types.

Lab Notebook Checks: There will be 5 lab notebook checks worth 10 points each. These checks are to look for accurate recording of results and complete answers to exercise concept questions. Students should upload photos of their lab notebook pages online.

GRADING POLICY:

Points Possible		**Percentage of Total Grade**
Exams: 2 at 100 pts. each	= 200 pts	50.0%
Lab Reports: 4 at 25 pts each	= 100 pts	25.0%
Concept Checks: 5 at 10 pts each	= 50 pts	12.5%
Notebook Checks: 5 at 10 pts. each	= 50 pts	12.5%
Total Points	400 pts	100%

**Biosafety Quiz and Honesty Agreement do not count towards final grade but are required to remain enrolled in the lab. Students who do not pass this quiz will be asked to re-take the quiz until a passing score is achieved.*

The following calculation will be used for your final grade percentage: Earned points /400 points:

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	50.0% and below

*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

REGRADE POLICY:
Any student may submit a request for a regrade of an assignment within *one week of assignment being available for review. Regrade request forms will be available on eLC for students to download.

**Timeline for regrade requests related Exam 2 will be announced at the end of the semester.*

EXTRA CREDIT:
The decision to offer extra credit is at the discretion of the course instructor and TAs. 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.

LAB PROCEDURES AND SAFETY:
Students will be given lab safety rules that they are expected to read and follow. Students will also be taught proper laboratory techniques that are to be used in the lab. **If students fail to follow these rules and techniques during the semester, points will be deducted from their total grade at a rate of 5 points per incidence.** The first incidence will result in a warning and reminder of proper procedures. After that, points will be deducted for each subsequent occurrence. Students will be notified at the time of the occurrence by their TA. Additionally, arriving late to lab (more than 15minutes after lab start time) will result in 5 point penalty per instance. TA will provide warning after first occurrence.

CORONAVIRUS: Students are expected to follow UGA's Coronavirus policies. As these policies may change, the most up-to-date policy details can be found on eLC and announced to students via campus email.

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

COURSE SCHEDULE:

Pre-Labs: Should be completed/reviewed *prior to* face-to-face lab
Lab Exercises: Exercises that will be completed during face-to-face lab
Post-Labs: Include data analysis, lab reports, notebook checks, and additional TA experimental videos

***Asterisk indicates an assignment due in eLC.**

Exams and Concept Checks: Will occur in class during scheduled lab day.
Lab Reports and Notebook Checks: Due on eLC 11:30pm Saturday of the indicated week

Date	Pre-Lab	Lab Exercises	Post-Lab
Unit 1 Aseptic Technique			
Jan 9-15	1.1, 1.2, 1.3	1.1 Lab Syllabus and Biosafety 1.2 Airborne microbes in the laboratory 1.3 Handwashing	Syllabus Biosafety PowerPoint *Biosafety Quiz
Jan 16-22		MLK JR. DAY NO LAB FOR ALL SECTIONS	
Jan 23-29	1.4, 1.5	Concept Check #1 1.2 Follow-up 1.4 Culture transfer techniques 1.5 Streaking for isolation	* Lab Notebook Check #1
Jan 30-Feb 5	1.6	1.4-1.5 Follow-up 1.6 Observing and enumerating microbes in your environment; parts 1 and 2	Lab Report #1 (Handwashing)
Unit 2 Microscopy			
Feb 6-12	2.1, 2.2 Dilutions video Microscope video	Concept Check #2 1.6 Follow-up 2.1 Basics of microscopy-using the compound light microscope 2.2 Simple staining	*Lab Notebook Check #2
Feb 13-19	2.3	Concept Check #3 2.3 Differential Staining	*Lab Notebook Check #3
Feb 20-26	2.4	2.4 Viewing fungi and protists	Review for Exam 1 *Lab Report #2 (Differential Staining)
Feb 27-Mar 5		Exam 1 (Units 1 and 2)	
Mar 6-12		SPRING BREAK	

Date	Pre-Lab	Lab Exercises	Post-Lab
Unit 3 Growth and Control of Microorganisms, Food Microbiology			
Mar 13-19	3.1	3.1 Environmental conditions	
Mar 20-26	3.2, 3.3, 3.4	Concept Check #4 3.1, Follow-up 3.2 Physical methods of control 3.3 Chemical methods of control 3.4 Antibiotic sensitivity	*Lab Notebook Check 4
Mar 27-Apr 2	3.5	3.2, 3.3, 3.4 Follow-up 3.5 Yogurt and Sauerkraut Data Analysis	*Lab Report #3 (Environmental Conditions)
Unit 4 Selective and Differential Media			
Apr 3-9	4.1	Concept Check #5 3.5 Follow-up 4.1 Gram Positive Selection and Differentiation	*Notebook Check #5
Apr 10-16	4.2, 4.3	4.1 Follow-up 4.2 Gram Negative Selection and Differentiation 4.3 Microbes of the Skin	*Lab Report #4 (Physical & Chemical Control, Antibiotic Sensitivity)
Apr 17-23		4.2 Follow-up 4.3 Follow-up	Exam 2 Review
Apr 24-30		Exam 2 (Units 3 and 4)	
May 1-7		No Lab for all sections Last Day of Classes Tues May 3 Reading Day Wed May 4	