

### Walters State Community College Course Syllabus

### **Course Information**

Course Number and Name: BIOL 2231 Introd to Microbiology Lab

Section ID: 80776.202380 Semester and Year: Fall 2023

**Credit Hours:** 1

Start Date: August 21, 2023 End Date: December 08, 2023

Course Format: CON - Conventional Methodology

**Catalog Course Description:** Laboratory exercises designed to demonstrate the distribution, isolation, cultivation, identification, and control of microorganisms. The use of microorganisms in

biotechnology will be examined.

Meeting Details: TR; 09:35AM - 11:00AM; NSCI 107

Course Drop Deadline: October 27, 2023

### **Instructor Information**

Name: Dr. Ashley Frazier

Role: Instructor

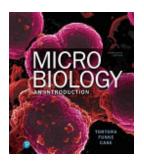
Office Location: NSCI 126A
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Office Phone: 1-423-585-6887
Email: Ashley.Frazier@ws.edu

Supervisor Name: Dr. Matthew Smith, Dean of Natural Science

Supervisor Phone: 1-423-585-6881 Secretary Name: Sherry Woody Secretary Phone: 1-423-585-6865

# Required Textbook(s) and Materials

Microbiology



ISBN: 9780134605180

Authors: Gerard J. Tortora, Berdell R. Funke, Christine L. Case, Warner

Bair, Derek Weber

**Publication Date: 2018-01-08** 

Edition: 13

# Student Learning Outcomes/Objectives

- The student will be expected to:
  - 1. Use proper sterile technique for handling microorganisms.
  - 2. Learn the parts and correct method for usage of a standard laboratory compound light microscope equipped with an oil immersion objective.
  - 3. Use proper techniques for preparing and heat fixing a smear and staining bacteria.
  - 4. Carry out and interpret simple, differential and special stains.
  - 5. Compare and contrast the cell walls of gram-positive and gram-negative bacteria.
  - 6. Understand and interpret various biochemical tests for identifying bacteria.
  - 7. Identify various protozoa, fungi, and extracellular parasites and list the diseases which they cause.
  - 8. Define the key terms related to the destruction or suppression of microbial growth: sterilization, disinfection, antisepsis, germicide, bacteriostasis, asepsis, degerming.
  - 9. Describe and demonstrate the various methods used for control of microbial growth and evaluation of disinfectants and antibiotics.
  - 10. Understand the theory behind and carry out the basic techniques used in immunology.
  - 11. Know growth characteristics and tests for identifying various bacterial groups.
  - 12. Carry out basic procedures used to determine water purity.

# Instructional Approach and Methods

Two laboratory exams worth 100 points each will be given. The exams will focus on activities and results obtained from the laboratory exercises and assess the achievement of the learning outcomes prescribed for this course. Your attendance is essential to your success. You are required to attend each laboratory session in its entirety. Each failure to do so without an acceptable excuse will result in 5 points being subtracted from the overall total points for each laboratory class

**missed.** If you cannot attend your normal laboratory section you may avoid the penalty by arranging in advance to attend a different section that week; however, this requires the advance consent of both lab instructors. It is **your** responsibility to make sure **your** regular lab instructor is aware that you attended a different section.

All lab exams are to be taken as scheduled by the instructor and all must be taken in order to receive a passing grade for the course. If you miss an exam with acceptable justification (e.g. A signed physician's note explaining why you could not attend.) you must contact your lab instructor within 48 hours to determine if other arrangements to take the exam can be made, otherwise a grade of zero will be given for that exam.

## Assessment, Evaluation and Testing Procedures

Assignments and exams may be given in class or online via d2L/eLearn. For those administered online through d2L/eLearn, students may be required to use a virtual proctoring program like Respondus Lockdown Browser with Monitor. Virtual proctoring programs will require a compatible device, microphone, and webcam. In the event that the student does not use the specified requirements or the entire assignment or exam is not completely proctored, this could result in a grade of zero "0" for the assignment or exam. Students will be provided specific testing procedure and assignment completion information directly from the instructor.

# **Grading Scale**

А	90% of 350 = 315-
	350
В	80% of 350 = 280-
	314
С	70% of 350 = 245-
	279

D	60% of 350 = 210-
	244
F	Less than 210

2 Laboratory Exams 100 points each 200 pts.

Lab Quizzes (will drop one) 100 pts.

Unknown bacterial identification <u>50 pts.</u>

Total 350 pts.

# **Assignments**

There will be no extra credit assignments.

# **Class Participation**

Class participation is required and attendance is recorded.

You are required to attend each laboratory session in its entirety. Each failure to do so without an acceptable excuse will result in 5 points being subtracted from the overall total points for each laboratory class missed.

### Course and Class Policies/Procedures

Exam Policy:

- 1. ALL exams are to be taken at times scheduled by the instructor.
- 2. ALL exams scheduled in the course by the instructor must be taken in order for the student to receive a passing grade.

- 3. Make-up exams will be given for excused absences only (excused absences include illness, death in family, and military or jury duty).
- 4. Make-up exams must be taken before the next scheduled exam.
- 5. All eLearn assignments must be submitted as scheduled.

## Additional Course Requirements/Details/Information

All Division of Natural Science courses prohibit academic dishonesty including, but not limited to, plagiarism and cheating. The minimum penalty is a grade of "0" (zero) on the examination or assignment. Academic dishonesty may also result in a grade of "F" for the course. Plagiarism, cheating, and other forms of academic dishonesty are strictly prohibited.

The wearing of hats and caps in class is not allowed! Students will be asked to remove their hats and caps. See eLearn for additional course information in the event that this course does not meet on campus.

STAY AWAKE IN CLASS. Your mere presence in class is not sufficient—you must be able to actively process the information presented! Sleeping in class is disruptive in two ways: the student who is snoozing is not interested and not participating in the classroom discussion; secondly, sleeping in class is considered to be disrespectful to the teacher and other students. The penalty for sleeping in class may range from the student being requested to leave the class with a following conference with the instructor, to notification of the Vice-President of Academic Affairs (in the cases of habitual sleepers). If you have a medical condition that prevents you from staying awake in class, please discuss this with the instructor.

### Safety:

- 1. There will be **NO food, drink or tobacco products in the laboratory**.
- 2. **NO opened-toe or open-heeled shoes** can be worn during lab. You will <u>not</u> be allowed to stay in the laboratory without the appropriate footwear.
- 3. **NO purses, bags or coats** on top of the student tables.
- 4. NO visitors in the laboratory without prior approval of the instructor.

### Your Right to Know:

Tennessee Law requires that you are provided notice that some of the laboratory exercises involve contact with chemicals which have been identified with potential health hazards. These chemicals include, but are not limited to: acetone, chloroform, formalin, acids and bases. While every effort has been made to make the materials as safe as possible these chemicals are toxic and you must be responsible for their safe handling. If **you** feel you may be at a higher risk than normal, if pregnant for example, we recommend you consult your physician.

## **Instructor Specific Information**

You are required to attend on campus lab meetings according to the schedule provided in the eLearn course. Alternative means for attending virtually rather than on campus will not be provided. Late assignments/quizzes are not accepted without an excused absence and will result in a zero for that assignment; work is not an excused absence. There is no partial credit offered in this class. Make-up exams may be in a different format than original exam. Please do not submit any work as HEIC or pages files. I cannot open these documents, and they will not be graded.

A binder for lab documents is required for lab. Electronic devices are NOT permitted in the microbiology lab; therefore lab exercises must be printed before lab. Students are expected to follow all lab safety rules and regulations at all times. Failure to follow these practices can result in removal from lab for the day.

Plagiarism, cheating, and other forms of academic dishonesty are strictly prohibited. The use of Al/ChatGPT of similar software to complete any assignments is cheating and will result in a zero on assignments and possibly failure of the course. Detection software is used in this course.

You are required to attend on campus class meetings according to the schedule provided in the eLearn course. Alternative means for attending virtually rather than on campus will not be provided when the course meets in person.

## **Academic Honesty**

Faculty expect all students to refrain from acts of academic misconduct including but not limited to:

1. Plagiarism - refers to using another person's ideas or writing without giving proper credit to the original source. Indulging in this type of conduct will subject the student to disciplinary sanctions, which may be imposed through the regular institutional procedures of Walters State Community College as outlined in the Student Handbook. Plagiarism will result in a grade of "0" for the paper/exam/presentation. Student Conduct and Disciplinary Sanctions contained in the

college Catalog/Student Handbook apply (see policy 04:18:02 Disciplinary Sanctions). Plagiarism includes, but is not limited to the following:

- a. Using cut/paste tool from original document with no references given.
- b. Copying another student's work and submitting it as one's own.
- c. Forging or otherwise altering signatures.
- d. Giving or falsifying academic documents or materials.
- 2. Cheating construed as attempting to deceive or mislead which includes, but is not limited to the following:
  - a. Utilizing old tests, projects, notes or written papers.
  - b. Providing unauthorized information to a fellow student about exam content.
  - c. Receiving unauthorized aid from any source with quizzes, examinations, or other assignments.
  - d. Seeking information in an unacceptable manner during/preceding an exam or other assigned work (cheat sheet, verbal exchange, looking at another person's paper or electronic device, utilizing headphones, using textbook when the test/quiz is not an open book test/quiz, using textbook test bank etc.).
  - e. Consulting with a classmate or others when taking a computerized test.
  - f. Disregarding other specific policies and procedures outlined for a particular class.
  - g. Utilizing unapproved technology/electronic equipment during testing (i.e.: mobile devices such as cell phones, smart devices, or tablets, etc.).
  - h. Using the same Internet Protocol network address (IP address) as another student for testing without approval from the course faculty.
- 3. The use of any generative artificial intelligence (AI) tool, such as OpenAI's ChatGPT, Google's Bard, or any other pre-trained language model (commonly referred to as "chatbot"), must be cited for any assignment where it has been used and may not be used unless specifically allowed by your instructor. Please see your instructor or the course policies within the syllabus if you have questions.

### **Student Resources**

#### **TUTORING SERVICES**

Students in need of tutoring assistance are encouraged to contact the Office of Student Tutoring located as follows:

Morristown Campus - Student Services Building Room L107 - (423) 585-6920

- Niswonger Campus GRNV 226 (423) 798-7982
- Sevierville Campus MMH Room 210 (865) 286-2787
- Claiborne Campus Room 123A (423) 851-4761

Specific tutoring assistance in mathematics and writing is available in-person and online as follows:

Morristown Campus - English Learning Lab - HUM 120 - (423) 585-6970

<u>Walters State English Learning Lab (opens in new window)</u> <u>ws.edu/academics/humanities/writing-lab</u>

• Morristown Campus - Mathematics Lab - MBSS 222 - (423) 585-6872

<u>Walters State Mathematics Learning Lab (opens in new window)</u> <u>ws.edu/academics/mathematics/learning-lab</u>

#### TECHNOLOGY SUPPORT

Students who need assistance with computing and technology issues should contact the IET Helpdesk by phone at Morristown: (423) 318-2742; Niswonger: (423) 798-8186; or Sevierville: (865) 286-2789 or on-line access.

<u>Walters State Helpdesk (opens in new window)</u> helpdesk.ws.edu

### STUDENTS WITH DISABILITIES SUPPORT SERVICES

Students with disabilities must register with Student Support Services each semester in the Student Services Building, Room U134 (phone (423) 585-6892) if they need any special facilities, services, or consideration.

<u>Walters State Student Support Services (opens in new window)</u> <u>ws.edu/student-services/disability/</u>

### SUICIDE PREVENTION STATEMENT

Walters State is committed to and cares about all students. Support services are available for any person at Walters State who is experiencing feelings of being overwhelmed, hopelessness, depression, thinking about dying by suicide, or is otherwise in need of assistance. For immediate help, contact the National Suicide Prevention Lifeline by calling or texting 9-8-8 or the Trevor Lifeline at 1-866-488-7386. Veterans may also contact the Veterans Crisis Line at 1-800-273-8255 (press 1) or Text 838255.

Walters State has a relationship in place with the following community agencies to provide services (may include crisis referral services, prevention screenings, etc.):

- Cherokee Health Systems 423-586-5032
- Frontier Health 423-467-3600

# **College Policies**

#### STUDENTS HANDBOOK AS OFFICIAL GOVERNING DOCUMENT

This class is governed by the policies and procedures stated in the current Walters State Community College Student Handbook. All students attending Walters State Community College, regardless of the time, location, or format of the class, must abide by the rules and regulations outlined in the current Walters State Catalog/Student Handbook and the current Walters State Timetable of Classes.

<u>Walters State Catalog (opens in new window)</u> <u>catalog.ws.edu/</u>

<u>Walters State Timetable of Classes (opens in new window)</u> <u>ws.edu/admissions/registration/</u>

### PURPOSE, LIMITATIONS AND MODIFICATION OF SYLLABUS

This syllabus sets forth the expectations for the course content, work, and grading as well as expectations for student performance and conduct. The syllabus does not constitute a contract between the student and the instructor or the College. The information contained here is subject to change at any time. The instructor reserves the right to modify this syllabus at any time with written notification to the students. Though changes are possible, it is expected that the course will be conducted as described in this syllabus for the semester/year specified in the Course Information section of the syllabus. This syllabus is only valid for the semester/year specified and course requirements are not guaranteed for future semesters.

#### **COURSE GROUND RULES**

- Students must attend the first day of on-ground class or contact the instructor prior to the first class. Failure to do this may result in being dropped from the class. Excessive absences may substantially lower the course grade.
- Regular class attendance is a student's obligation for any course regardless of format. (See the Walters State Catalog/Student Handbook). If a student misses class, it is his or her responsibility to contact the instructor regarding missed assignments and/or activities and to be prepared for the next class assignment.
- Students enrolled in web courses must follow the course attendance policy defined for online attendance during the first week of class and throughout the term. Failure to do this may result

- in being dropped from the class during week one OR may result in the accrual of absences which may negatively impact the student's grade in the course.
- Students who have not paid fees on time and/or are not correctly registered for this class and
  whose names do not appear on official class rolls generated by the Walters State student
  information system (MyWS) will not be allowed to remain in class or receive credit for this
  course.
- Electronic devices must not disrupt the instructional process or college-sponsored academic
  activity. Use of electronic devices is prohibited unless use of the device is relevant to the activity
  and use is sanctioned by the faculty member in charge. Electronic devices that are not relevant
  to the activity or sanctioned by the faculty member in charge should be set so that they will not
  produce an audible sound during classroom instruction or other college-sponsored academic
  activity.

#### FINANCIAL AID

Students receiving any type of financial aid or scholarship should contact the Financial Aid Office before making any changes to their schedule. Schedule changes without prior approval may result in loss of award for the current term and future terms.

All forms of student Financial Aid may be jeopardized or lost due to the lack of Satisfactory Academic Progress in one or multiple courses. Lack of Satisfactory Academic Progress may negatively impact a student's degree/certificate completion pace and further jeopardize Financial Aid eligibility.

### CANCELLATION OF CLASSES AND ACADEMIC CONTINUITY

For information related to the cancellation of classes due to inclement weather or other events, please check the Senators Emergency Text system or the college's Web site at:

<u>Walters State Homepage (opens in new window)</u> ws.edu/home/

Walters State Facebook page (opens in new window)
https://www.facebook.com/WaltersState/

<u>Walters State Twitter page (opens in new window)</u> https://twitter.com/waltersstate

or call the college's student information line, 1-800-225-4770, option 1; the Sevier County Campus, (865) 774-5800, option 7; the Niswonger Campus (423) 798-7940, option 7; or the Claiborne County Campus, 423-636-6200, option 7. Also, please monitor local TV and radio stations for further announcements.

When an event or disaster interrupts the scheduled operations of the college and the ability to proceed with the academic course activities as planned, the college and your instructor may alter the course plan outlined in the syllabus. Should an event occur, students should refer to their course e-Learn pages and/or class materials previously delivered to receive guidance from their instructor. Students should continue to monitor the official college channels of communication listed in the above paragraph. If you would like to sign up for the Senators Emergency Text system, please go to the following Web site:

### <u>Senator Emergency Text System (opens in new window)</u> ws.edu/set/

Dual Enrollment students attending on a high school campus should refer to the high school inclement weather cancellations.

#### LEARNING MANAGEMENT SYSTEM

Brightspace (commonly known as eLearn or D2L) is the college's Learning Management System (LMS).

Brightspace is committed to accessibility by "deliver[ing] a learning experience that meets the needs of all people, regardless of age or ability." <u>Brightspace Accessibility Standard (opens in new window)</u>

Brightspace is also committed to guarding student data and privacy. <u>Brightspace Privacy Policy</u> (opens in new window)