

**SYLLABUS**: Microbiology Lab HYBRID (HYB)

**Course Number**: BIOL 2120

**Instructor Information**:

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**Student Learning Outcomes**

 **Learning Outcome #1.** Use and comply with laboratory safety rules, procedures,

 and universal precautions.

 **Learning Outcome #2.** Demonstrate proficient use of a compound light

 microscope.

 **Learning Outcome #3.** Describe and prepare widely used stains and wet mounts,

 and discuss their significance in identification of

 microorganisms.

 **Learning Outcome #4.** Perform basic microbiology procedures using aseptic

 techniques for transfer, isolation and observation of

 commonly encountered, clinically significant bacteria.

 **Learning Outcome #5.** Use different types of bacterial culture media to grow,

 isolate, and identify microorganisms.

 **Learning Outcome #6.** Perform basic bacterial identification procedures using

 biochemical tests.

 **Learning Outcome #7.** Estimate the number of microorganisms in a sample using

 methods such as direct counts, viable plate counts,

 or spectrophotometric measurements.

 **Learning Outcome #8.** Demonstrate basic identification protocols based on

 microscopic morphology of some common fungi and parasites.

**Student Requirements for Completion of the Course**

 There will be 4 lab practicals in this course worth 100 points each. A lab practical will be 50 multiple choice questions and will be taken in person during

our class time. There will be a review sheet and a review session for each lab practical. There will be 3 lab write-ups in this class. These will be done in groups and in class, with students doing a write-up involving an experiment or a lab

procedure. The grade for all 3 lab write-ups combined will be worth 44 points, or 10% of the grade in this course. There will be a maximum of 24 extra credit points available in this course. On various days, students will go on to our Moodle page to do an extra credit assignment. Each assignment will have 6 questions, worth 2 points each. These questions will be multiple choice and students will be allowed to look up the answers in the notes on our Moodle page. These extra credit assignments will not be set up on the Respondus program. We will do three of these assignments this semester. A student can miss one of these assignments and still get all 24 of their extra credit points. The extra credit points will be added to each student's lowest lab practical grade at the end of the semester. If necessary, the instructor will divide up a student's extra credit points to avoid giving a grade over 100.

**Student Assessment**

 You will have the following possibilities for earning points:

 Four lab practicals 400 points (90% of grade)

 Lab write-ups 44 points (10% of grade)

 444 points

**Grading scale**

 A= 90-100

 B= 80-89

 C= 70-79

 D= 60-69

 F= 59 or below

 The cutoff point for rounding is .45. For example, a final average of 89.45 is an A but a final average of 89.44 is a B. This same cutoff point is in effect all the way down the grading scale.

**Class Schedule**

**Unit Material to be covered**

Unit 1 Labs 1-3

 Unit 2 Labs 4-6

 Unit 3 Labs 7-9

 Unit 4 Labs 10-12

**Absentee Policy**

Texarkana College's absentee policy allows instructors to withdraw a student from a course due to excessive absences. Faculty members are not obligated to provide opportunities for students to make-up missed assignments and tests as a result of student's absences from class.

**A student should not stop attending a class without formally withdrawing from the course by the institutions published Last Day for Students to Drop. If a student stops attending class after the published Last Day for Students to Drop, the student may receive a grade of "F" in the class.** The

instructor will submit the last date of attendance for students receiving a grade of "F" or "W".

Withdrawal from a course(s) **may** affect a student's current or future financial aid eligibility. Students should consult the Financial Aid Office to learn both short and long term consequences of a withdrawal. A student's absence due to **school trips and/or school business** will not be counted against a student's allowable number of absences. **Military duty** and absences for **Holy Days** (FBD LEGAL) are covered in a separate section of the catalog and the student handbook. These are the only excused absences that are considered by Texarkana College. Responsibility for work missed for any absence is placed on the student. Instructors are required to allow students to make up work missed if the absence is due to military duty or religious holy days when students follow the correct notification procedures. Instructors are not required to allow students to make up work for absence due to other reasons. Make-up policies are listed in each individual instructor's syllabus.

 After official registration, the following number of unexcused absences will be the maximum allowable before a student **may** be dropped from the class:

Class or Lab Meets: An instructor **may** withdraw a student from

 a course if the absences exceed:

Two times/week: (8 weeks)

 (MW) or (TR) 2

**Make-up Policy**

 -Lab practicals can be taken early, if a student receives permission

 from the instructor.

 -A make-up exam must be taken for a missed lab practical. Up to 2 missed

 lab practicals can be made up with the grade on this make-up test.

 On our Moodle page, there is a section called LAB PRACTICAL MAKE-UP.

 In that section a review sheet and a set of flash cards will be posted. This

 will be some highlights from the entire semester. The lab practical make-up

 test will be 50 multiple choice questions that all come from the flash cards

 in that section. Students will need to make

 an appointment with the instructor to take the lab practical make-up test.

-A grade of 0 will be recorded for a third or fourth missed lab practical.

 -If a student misses a group lab write-up grade, they will have two options

 to make up the grade: 1) have a student in their group vouch for them

 so they get the same grade received by the rest of the group, 2) do

 the missing lab write-up and turn it in late. Any group lab write-up

 turned in late will have 5 points taken off the grade.

-The instructor for this course reserves the right to give a No Grade (NG)

 for a missed lab practical. This could involve an excused absence or bad

 weather. A No Grade does not count against the student as a missed lab

 practical. This grade can be made up, if that improves the student’s

 overall grade.

**Academic Integrity Statement**

 Scholastic dishonesty, involving but not limited to cheating on a test,

 plagiarism, collusion, or falsification of records will make the student liable

 for disciplinary action after being investigated by the Dean of Students.

 Proven violations of this nature will result in the student being dropped

 from the class with an "F". This policy applies campus wide, include TC

 Testing Center, as well as off-campus classroom or lab sites, including dual

 credit campuses. This information can be found in the Student Handbook

 at http://texarkanacollege.edu

**Inappropriate Behavior**

 If a student in this course exhibits inappropriate or disruptive behavior, that

 student may be asked to leave the classroom. Students in this course may

 receive a written warning for inappropriate behavior. If the student exhibits

 inappropriate behavior again after receiving a written warning, that student

 will be dropped from the class with a grade of "F".

**Disability Act Statement**

 Texarkana College complies with all provisions of the Americans with

 Disabilities Act and makes reasonable accommodations upon request.

 Please check in the Administration building if you have questions in this area.

**Financial Aid**

 **Attention!** Dropping this class may affect your funding in a negative way!

 You could owe money to the college and/or the federal government. Please

 check with the Financial Aid office before making a decision.

**Basic Needs Security**

Any student who has difficulty affording groceries or accessing enough

 food to eat every day, or who lacks a safe and stable place to live and

 believes this may affect their performance in this course or ability to remain

 in school, is urged to contact Tonja Blase, Director of Student Retention, at

 (903) 823-3349 for support. Furthermore, please notify the professor if

 you are comfortable in doing so. This will enable them to provide

 any resources they may possess.

**Alternate Operations during Campus Closure**

In the event of an emergency or announced campus closure due to a national

disaster or pandemic, Texarkana College may need to move to altered operations

and course delivery methods. During this time, Texarkana College may opt to

continue delivery of instruction through methods that include, but are not

limited to: online learning management system (Jenzabar or Moodle), online

conferencing through TEAMS, email messaging, and/or an alternate schedule.

It is the responsibility of the student to monitor Texarkana College’s website

for instructions about continuing courses remotely, instructor email

notifications on the method of delivery and course-specific communication,

and Texarkana College email notifications for important general information.

**COVID-19 Online/Virtual Environment Instructional Commitment**

 The ongoing COVID-19 situation will require that some course materials and

instruction are provided through an online and/or virtual format. Even if all

or a portion of a class was originally scheduled to meet face to face, social

distancing guidelines associated with COVID-19 will limit the number of students

who are able to attend face to face classes in person simultaneously. Further,

circumstances associated with COVID-19 could cause the college to be forced to

shift completely to an online and/or virtual delivery at any time during the semester. While TC faculty members are committed to providing students the

option of face to face instruction if possible, students should be prepared to

continue their classes in an online and/or virtual environment if necessary.

Texarkana College is committed to maintaining engaging, high quality instruction

regardless of the delivery format.

**Computer Requirement Policy**

 Students are required to have a computer with Internet access for classes. The

computer must be an actual computer—smart phones, iPads, Androids,

Chromebooks, etc. are not acceptable substitutes because they lack software

compatibility necessary to complete all assignments and tests. Financial costs

for the necessary equipment and internet access are the responsibility of the

student.

 Students needing to purchase a computer may do so through the Texarkana College Bookstore. Systems purchased through the bookstore meet or exceed

all requirements, are competitively priced, and may be purchased using

financial aid funds. If the system is purchased though another source, it is the

student’s responsibility to ensure the system meets all requirements.

**Computer system requirements:**

 -Webcam, microphone, and speaker or headphones.

 -Windows 10 or a recent version of Mac OS (minimum Sierra). Windows 10

 S mode is not supported.

 -Hardware capable of running Microsoft Teams (free download) and supports

 multi-media playback.

 -Support for Chrome or Microsoft Edge---Note: Firefox, Safari, or other browsers

 may not work on all TC applications.

 -Able to run Microsoft Office which will be provided free to TC students.

 -Adobe Reader or another PDF viewer.

 -Antivirus software such as Windows Defender or another 3rd party anti-virus

 solution.

 -The Respondus Lockdown browser is used for taking tests; therefore, the

 system must be capable of running this software. Most newer systems

 that meet other specifications should work.

Students should regularly backup content to prevent loss of coursework due to

hardware failure. Backup copies of documents and other coursework may be

placed on OneDrive cloud storage. OneDrive is included free or charge for all

TC students.

A list of Internet service providers can be found on the TC website at:

<https://www.texarkanacollege.edu/coronavirus/>.

**TEXARKANA COLLEGE POLICE DEPARTMENT**

 **(903) 823-3330**

**Using Moodle**

Our course content will be loaded onto the Texarkana College Website, in

 the Moodle platform.

 To access Moodle directly from a computer:

 -Go to the TC website

 -Click on **myTC**

 -On the left side of the screen in the "blue bar" area, click on **TC Online-**

 **Moodle LMS**

 -Click on **log in** at the top right of the screen

 -Log in to Moodle with your username and password

 -Click on our class

 To accesss Moodle directly from a smart phone:

 -Go to the TC website

 -Click on the **three bars** at the top right of the screen

 -Click on **myTC**

 -Click on the large **arrow (>)** at the bottom left of the screen

 -Click on **Quick Links** at the top right of the screen

 -Click on **TC Online Moodle LMS**

 -Click on **Log in** at the top right of the screen

 -Log in to Moodle with your username and password

 -Click on our class

To access Moodle by way of my TC:

 -Go to the TC website

 -Click on **myTC**

 -Log in to myTC with your username and password

 -Click on our class

 -There will be a Welcome message like this: "Welcome to our

 Microbiology lab course. To access our course content, click

 the link **HERE**”.

 -After you clink the link **HERE,** then

 click on **Log in** at the top right of the screen

 -Log in to Moodle with your username and password

 -Click on our class

Once you get into our class on Moodle, you should see our sections:

WELCOME/ORIENTATION

1. LAB 1 4. LAB PRACTICAL MAKE-UP
2. LAB 2 5. LAB PRACTICALS
3. LAB 3

**How to take tests in our course**

-**Students will take the lab practicals in this course on**

 **campus and in person, using a scantron and a pencil.**

 **-If a student can verify they are doing a COVID quarantine,**

 **that student will take their lab practical online by going**

 **to our Moodle page and using a program called Respondus.**

 **-Students will have one hour to complete each of our lab practicals.**

 **If our lab practical starts at 9:30, students will have until 10:30 to**

 **complete the lab practical. If a student comes in late to take a lab**

 **practical, they will still have until 10:30 to complete the lab practical.**

 -**There will be no bathroom breaks during a lab practical in our course.**

 **If a student has an emergency situation they can go to the bathroom,**

 **but they cannot come back and finish that lab practical. It will count**

 **as a missed lab practical.**

 **-During a lab practical, students are now allowed to use earbuds or**

 **headphones. Students are also not allowed to have a hood pulled**

 **up over their head during a lab practical.**

 **-The instructor for this course reserves the right to give a student a No Grade**

 **for a missed lab practical. This could be a due to an excused absence or**

 **bad weather/road conditions. The No Grade does not count as a a missed**

 **lab practical and the student has the option to make up this grade at no risk.**

The Respondus program locks a student in

 to the test and also makes a video/audio recording of the student taking

 the test to make sure students do not look up the answers.

 -Requirements for the Respondus program: (lockdown browser and

 video monitoring)

 -Students must use a Mac or Windows desktop or laptop computer, or

 an iPad. Chromebooks, ASUS devices, and smart phones are not supported

 by Respondus.

 -Students must have a webcam either built into their computer or one that

 can plug into their computer with a USB cable.

 -The first time a student tries to take one our tests using Respondus (Practice

 Quiz), they will be prompted to download the Respondus program to their

 computer. Students must do this free download in order to use Respondus

 and take tests in our course. If students used the same device for all of our

 tests, the download will only be required one time.

 -The Respondus program features a lockdown browser. Once a student starts a

 test, they will not be able to leave the test to access something else on that

 device. Students will only be able to access something else on that device

 when they have submitted their lab practical attempt for grading.

 -The Respondus program also features video monitoring. A video recording of the

 student will be made while they are taking the exam. This is to ensure the

 student does not look away from the computer screen to look up the answers.

 Students in this course are expected to rely on what they have learned from

 studying when taking a test. Looking up the answers is not allowed. If a student

 looks away from the computer screen too much during an exam, the instructor

 will receive a report about a possible problem. That student may have been

 looking away from the screen to look up the answers. **Students who** **generate**

 **a report by looking away from the computer screen too many times during**

 **a test will most likely have 25 points taken off their test grade. The grade with**

 **the 25 point deduction will not count as the student’s lowest grade and it**

 **will remain unchanged. If a student wears headphones or earbuds during**

 **a test, that test grade would not count and their attempt would count**

 **as a missed grade. If a student takes a test and no video is created in**

 **the Respondus program, that attempt will count as a missed test.**

 Students must rememberthat during the lab practical they must keep

 their eyes focused on theircomputer screen.

 -**There will be no exceptions to this set up for our lab practicals. No lab**

 **practicals will be given online in this course without the Respondus**

 **program being used.**

**How to take a lab practical:**

 **-Students will take the lab practicals for this course**

 **on campus and in person, using a scantron and a pencil.**

 -If students must take lab practicals online, they should follow these

 instructions:

 -Go to our class in Moodle.

 -Click on a section called LAB PRACTICALS

 -Click on the test you are taking (Ex: Lab Practical 1)

 -If a student does not have the Respondus program on their computer, they

 will be prompted to download the program at this point. The program is

 free and takes about 5 minutes to download.

-Follow the prompts from Respondus to make sure the video monitoring is

 properly set up.

 -Click on “Start attempt”.

 -You will click to choose your answers to 50 multiple choice questions. To change

 an answer, simply click the answer you want to change to. When you

 are finished, click on “Finish attempt”. At this point you will see a list of all of

 the test questions and for each question it will say either “Answer saved” or

 “Not yet answered”. At that point make sure you have answered all the

 questions. If at that point you want to go back and answer a missed question

 or change an answer, you can click on “Return to Attempt”. When you are

 satisfied with all your answers, you can click on “Submit all and finish”. Then

 click on “Submit all and finish” again. For a lab practical, you should see your

 grade right away, and your grade will be posted on myTC later that day. Once

 the lab practical has closed for all students, you can then go back to the lab

 practical and see which questions you missed and the correct answers. **The**

 **lab practicals in this course that are taken online will be open during our**

 **class time that day.** **If a student is still taking a lab practical when it closes,**

 **the student will be cut off and will not be allowed to answer any**

 **more questions.**

**How to take the lab practical make-up test**

-If a student misses a lab practical this semester, they must take a lab practical

 make-up test.

 -There is a section in our Moodle page called “Lab Practical Make-Up”.

 When the time comes, there will be 2 things posted in this section:

 1) a handout on what to study for the make-up test, 2) a set of flash

 cards to help students study for the make-up test.

 -On the handout will be certainly highlights from the entire semester for students

 to review. **The make-up test will be 50 multiple choice questions that will all**

 **come from the flash cards in this section.**

 -Students will take the lab practical make-up test in person by making an

 appointment with the instructor.

 **-The lab practical make-up test can take the place of two missing lab practical**

 **grades. A student will get a grade of 0 for a third or fourth missed lab**

 **practical.**

 -**Students only take the lab practical make-up test if they missed a lab practical.**

**Microsoft Teams**

 Our class sessions will not be set up on Microsoft Teams. However,

there will be videos made by way of Teams that will be review sessions

for the next lab practical. Students will receive an email with a link to

watch these videos.

**How to join a live session on Microsoft Teams**

-Students can use a link in an email invitation to join a Teams session.

 If a student has Microsoft Teams downloaded on their computer, they

 can use these steps to join a Teams session:

 -Go in to Microsoft Teams and click on the “Teams” icon on the left side

 of the screen. Then click on our class.

 -On the left side of the screen, click on the correct channel for that session.

 In our class, the name of each channel will include the date of the session,

 such as “Lab session July 5”.

 -Once you are in the correct channel, click on “Join” to join our live session.

 -Once you join the live session, you should use the task bar near the bottom

 of your screen to turn off your video and your microphone. If you have a

 question you can turn you microphone on and ask the question—then turn

 your microphone back off again.

 -All of our Microsoft Teams sessions will be recorded so students have the

 option of watching a recorded version of one of our Teams sessions.

**How to watch a recorded version of a Microsoft Teams session**

-Go in to Microsoft Teams and click on the “Teams” icon on the left side

 of the screen. Then click on our class.

 -On the left side of the screen, click on the correct channel for the session

 you want to watch (Example: “Lab session July 5”).

 -Once you are in the correct channel, you should see a blue bar on the screen.

 Inside the blue bar is lists the exact date and time of the session. Beneath

 the blue bar you should see a video screen. Click on the video screen to

 watch a recorded version of that session.

 -If the video screen is not visible to you, it may be the stream for that session

 has been closed. To fix this, click on a blue link that is directly beneath the blue

 bar to open up that stream and see the video screen to click on.

 **-Students in this class will receive an email that includes a link to watch**

 **a recorded version our Teams sessions that will be a review for the**

 **next lab practical.**

**HYBRID (HYB)**

 Our class has been designated as HYBRID (HYB). This means that half

of our class time will be meeting face to face. The other half of our class

time will be students working on their own online. This will involve studying

information on our Moodle page for the next lab practical, and possibly

watching videos of review sessions.

If students have technology problems this term using Moodle, Microsoft Teams, or

Respondus, they should contact the Texarkana College helpdesk at

<https://www.texarkanacollege.edu/helpdesk/> and then submit a ticket requesting

help for a specific issue. Students may also call the help desk at: (903) 823-3030.