

Biol 4392
Instructional Techniques in Microbiology Leader Course Syllabus
Fall 2017

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Office Hours: Tues & Wed 1:00 pm – 2:30 pm or **by appointment**.
You can make appointments by email but
make sure to get a response.

~Please allow 24 to 48 hours (excluding weekends and holidays) for a response to any email
regarding any topic/concern~

**Course Number and
Course Title** Biol 4392
Instructional Techniques in Microbiology Leader

Class Location: Life Science Building 340
Meeting Time: Monday – Friday

Required Textbook: **There is no textbook required for this course. The instructor will provide the following handouts:**

Lab Handouts: Making Media: The 4388 Manual
Lab Safety Sheet
Directed Study Evaluation Form

Prerequisites: Students must have a 3.00 or better or permission of supervising instructor, have taken and received a “B” or better in a General Microbiology class, and is majoring in Biology or a sub-discipline of Biology. Students cannot be concurrently enrolled in Biol 3444, Biol 4390, and Biol 4392.

Course Description: Instructional Techniques in Microbiology Leader is a course designed for students majoring in Microbiology who have taken the instructional techniques in microbiology course and want to strengthen their skill set by gaining additional experience making media and preparing and prepping the general microbiology labs. This course is also for Biology students and students majoring in a sub-discipline of Biology who want to learn the basic skills necessary to making media and preparing and prepping the general microbiology labs.

Student Learning Outcomes: Student learning outcomes are to offer an in depth knowledge of how the general microbiology laboratory operates with emphasis being placed on the comprehensive understanding of how and why the microbiology laboratory functions with respect to aseptic techniques, microbiological media, and the 5 I's of microbiology. Students will also learn how to make various types of media, organize and manage chemical and microbial inventory, and

effectively communicate and assist individuals in the microbiology prep laboratory who are enrolled in Biol 4390.

Student's Responsibility: Biol 4392 is prepping and preparing for microbiology labs, organizing the microbiology laboratory (including inventory), and other responsibilities agreed upon between you and the instructor. You can expect your responsibilities to include a minimum of approximately 4 hours of hands-on tasks in the laboratory work each week, accordingly to which course you are registered in. Depending on enrollment in Biol 4388, you might be asked to teach if you are majoring in Microbiology. **You are required to attend the one hour** regularly scheduled lab meeting. Attendance is required – your grade can and will be dropped if you miss the meetings.

Your responsibility falls into four (4) or five (5) of the basic categories:

1. Train and supervise students in microbiology prep lab.

Prepare students to be independent in the microbiology prep lab. You are responsible for training TAs on how to make media, how to use the instruments in the prep lab, and prepping for the upcoming microbiology lab. In the event that a TA cannot or does not arrive for his/her task(s), you will be responsible for ensuring his/her task(s) are completed.

You are also responsible for basic lab safety for yourself and the students. Remember, as you work with the students, to make certain you are using good aseptic technique and good lab safety. If you have any difficulties or questions, contact Dr. Jackson.

2. Preparing all media and supplies as well as inoculations for each week's lab.

Part of teaching anything is preparing for the class. In microbiology, this includes making media and preparing supplies and inoculations for each lab. Each week an updated schedule of assigned duties will be posted in the micro prep room. It is your responsibility to check the schedule each week for your assignment. If you have any difficulties or questions, contact Dr. Jackson.

3. Organize laboratory.

Maintain all stocks and inventory (chemical and supplies). You are responsible for entering all new inventory into the Inventory Excel spreadsheet and alerting Dr. Jackson when items need to be replaced.

4. Clean-up.

Clean up in the micro lab is basic to lab safety. Undergraduate TA responsibilities include keeping the main student laboratory and the prep room clean. At the end of each lab, the laboratory is to be cleaned before you leave and waste should be properly disposed. At the end of each prep session, the prep room is to be cleaned and supplies returned to their

proper place before you leave.

5. Responsibilities agreed upon between the student and the instructor.

Gain additional experience. If there are microbiology laboratory skills that you want to learn (managing, assisting other students in the lab, making various kinds of media, etc.), inform the instructor.

You are also responsible for basic lab safety. Remember, as you work, make certain you are using good aseptic technique and good lab safety. If you have any difficulties or questions, contact Dr. Jackson.

Grading Policy:

You will be graded on three to five items outlined above, according to the section of the class you are enrolled, your critique by the instructor on the attached "Directed Study Evaluation," and your attendance. **Attendance is required at the weekly lab meetings, your weekly assigned lab task(s), and your attendance at your weekly prep times, if applicable. Your grade can and will be lowered if you have more than two unexcused absences.** Please note whether or not an absence will be excused is at the **discretion of the instructor**.

Attendance Policy:

Attendance is a MUST! **Attendance is required at the weekly lab meetings, your weekly assigned lab task(s), and your attendance at your weekly prep times, if applicable.**

Important University Policies:

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. Last day to drop the class is **November 1, 2017 prior to 4:00 pm**. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/aao/fao/>).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD)**. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364.

Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671.

Please submit a hard copy of the Adaptive Resource Center (ARC) Testing Request Form to the instructor 72 hours in advance of exam date (excluding weekends and holidays). Forms submitted after this time period will not be accepted.

Title IX: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit www.uta.edu/titleIX.*

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT

System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Academic Dishonesty: It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. According to the UT System Regents' Rule 50101, §2.2, "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts."

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

Recommendations: Recommendation letters are a reflection of the professional relationship between the student and instructor. In writing the letter, I should be able to recall clear and distinct discussions and interactions (i.e. active participation in lecture). If at the point of receiving a request to write a recommendation letter, if you and I have not developed a professional relationship and/or I am unable to recall discussions and interactions, I might not be able to write a favorable recommendation.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. **All students are assigned a MavMail account and are responsible for checking the inbox regularly.** There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as

“lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located at the south (the 1st floor) of Science Hall. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

<p>Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381</p>

Course Schedule:

“As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. – Joy M. Jackson.”

Mandatory Online Safety Training:

1. Go to <http://www.uta.edu/training>.
2. Log on using your network log-on ID and password (what you use to access email). If you do not know your NetID or need to reset your password, visit <https://webapps.uta.edu/oit/selfservice/>.
3. The available courses for completion will be listed under "Training I'm Enrolled In". Complete the course entitled 'Student Lab Safety Training – General.' ***NOTE: If you completed Wet, Dry or Biology Lab Safety Training course last semester for another class, that training is still applicable until the end of this academic year. Please follow instructions in #4 to print the certification page for your TA.
4. Go to 'Training I've Completed' and print the displayed page for your TA. Verify that it shows clearly your name, and that 'General, Wet, Dry or Biology' training is completed/passed and the date when the training was completed. If you have just completed the training but it is not updated on the 'Training I've Completed' page, please log out of the system and log back in. If the training still does not show up on this page, call the Helpline at 817-272-5100.
5. If you were enrolled in a course with a lab last semester and did not complete the training or if you do not see training for this academic year listed, email compliance@uta.edu providing your name, a contact phone number, NetID and course (e.g. BIOL 1441-005) and request the appropriate training for your course.
6. Students who have not completed the training by census date may be dropped from the lab (and consequently the lecture).
7. Lab Safety Training is required to be completed once every academic year. Training completed in the Fall semester is valid for the Fall, Spring and Summer sessions. It is your responsibility to print your training certification page and turn it in each semester to your TA for each course with a lab you are enrolled in.

For training specific questions, contact the Environmental Health and Safety office at 817-272-2185.

For technical assistance with the training, please contact the Office of Institutional Compliance at 817-272-5100 or email compliance@uta.edu

~The instructor reserves the right to modify this syllabus at any time. Students will be notified of any modifications.~

Instructional Techniques in Microbiology Leader Evaluation

TAs will be evaluated on several criteria that are important to the labs running smoothly.

DATE OF EVALUATION _____

NAME Last _____ First _____

CLASS _____ SECTION _____

Criteria		Grade			
		Seldom - 1	Sometimes - 2	Usually - 3	Always - 4
1	Attend weekly meetings				
2	Is on time for weekly lab task(s)				
3	Familiar with and follow lab procedures and protocols (making media, waste disposal, utilizing autoclave, etc.)				
4	Takes initiative and begins working on setting up cart for lab without prompting				
5	Procedures/techniques done effectively, efficiently and with care				
6	Works well in team and collaborative settings				
7	Stays to remind students to clean up or aided in final check of clean up without prompting after lab or after prep				
8	Is helpful and available to students for questions				