

BIOL 2041.002 Microbiology Syllabus, Spring 2026

Meeting times

Dates: 1/12/2026 to 5/8/2026, Class Time: Tuesday and Thursday, 8 am to 9:20 am, face-to-face

Class Location: BLB 245

Contact Information for Instructor

Dr. Syeda T. Alam

Email: syeda.alam@unt.edu **(preferred)**

Office Location: Life Science Complex Building A (LSC-A), Room #227

Office Hours: Monday 9-10:30 am and Thursday 9:45 am to 11:15 am

Course Description

Microbiology is a course intended for majors and minors in biological sciences. The course content includes survey of the microbial world; classification, ecology, morphology and physiology of eukaryotic and prokaryotic microorganisms.

Prerequisites or Other Restrictions

Concurrent enrollment in BIOL 2042 is recommended but not required. The required prerequisites are BIOL 1710 (Principles of Biology I), either BIOL 1750 or BIOL 1760 (may be taken concurrently), and CHEM 1410 - General Chemistry I. and CHEM 1420 – General Chemistry II is highly recommended (may be taken concurrently).

Course Objectives

This course utilizes the Recommended Curriculum Guidelines for Undergraduate Microbiology Education from the American Society for Microbiology. The full list of these guidelines can be found at the following on the ASM Recommended Curriculum Guidelines for Microbiology Education website.

By the end of this course, students will be able to:

- Define scientific terminology relevant to the concepts found in the ASM Curriculum Guidelines
- Describe the concepts found in the ASM Curriculum Guidelines
- Provide examples of microorganisms or their processes which demonstrate the concepts found in the ASM Curriculum Guidelines
- Analyze and interpret results from a variety of microbiological methods and apply these methods to analogous situations
- Effectively communicate fundamental concepts of microbiology in written and oral format
- Identify and discuss ethical issues in microbiology
- Identify credible scientific sources and interpret and evaluate the information therein

Course Materials

The textbook is Microbiology: An Introduction, by Tortora, Funke & Case (14th Ed.). Here is the ISBN for Mastering Microbiology with Pearson eText Access Code: 9780138244156.

All class reading assignments in this syllabus are identified based on this book.

Please check Canvas regularly for announcements, PowerPoints, reviews, assignments and any updates. It is your responsibility to check for announcements and to have notifications on. Course materials provided in this course are reserved for use only by students in this class for educational purposes. These materials should not be shared outside

the class in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.

Communication & Feedback

- Students should email the instructor with any questions or concerns as soon as they arise. Please don't wait until deadlines have passed or it is too late to remedy the situation. The instructor will respond to email within 24-48 hours (weekends and holidays excluded). The instructor will NOT respond to emails sent from outside of these accounts (such as gmail, yahoo, etc)
- Communication will be done via Canvas announcements, emails to your UNT email address, or in class. To avoid missing announcements, you should make sure that your Canvas settings are correct for receiving email notifications from Canvas. Please check your UNT emails and Canvas email regularly for time sensitive communication
- Students facing technical problems with course material or online assignments on Canvas should contact the instructor as early as possible before deadline. There will be grade penalty for late submission if not contacted earlier
- All grades are posted within 7 days. The Canvas grade book is set up to calculate the student's grade throughout the semester. Please email the instructor with any questions about any grades, how assignments are graded, or how to calculate the course or lecture grade

Class Expectations

Respect for others is vital. As a student, you are expected to work individually and with others, to create an atmosphere that is safe, valuing of one another, and open to diverse perspectives. Everyone is expected to show courtesy, civility, and respect for one another.

Course Policies

Attendance

Regular check-in and completion of materials constitute attendance. Failure to participate in class for an extended period of time will lead to a grade of "F". **The last day to withdraw from classes is April 10th, 2026.** Research has shown that students who attend class are more likely to be successful. The only excused absences recognized by the University of North Texas are observation of **religious holidays, military service or wherein a student is representing the university in an official capacity such as athletics or band**. According to UNT policy: "An activity or event is organized and sponsored by the university when it has been planned, funded and properly approved by the appropriate university official".

<https://policy.unt.edu/sites/default/files/06.039%20Student%20Attendance%20and%20Authorized%20Absences.pdf>. If the duration of absence is longer, then students should contact the Dean of students. The Dean of Students office will verify the students' documentation and advocate on the student's behalf, as appropriate, to instructors for excused absences. If you must miss a class period, contact your instructor immediately via email to discuss the reason for your absence. Excused absences must be accompanied by proper documentation. It is also helpful to make connections with other students to form study groups. Do not wait till the last moment for finishing the assignments. Rolls will be taken each day, and you are responsible for signing your name on the sign-up sheets. **Arrive to class promptly and do not leave until the scheduled ending time of the class. Failure to do so will result in missing in activity points for that day.**

Students are responsible for letting the instructor know of the following absences for make-up:

- Professional school interviews

- Conference attendance
- Receiving awards such as scholarships or other academic honors
- Missing class due to being waitlisted (only applicable prior to census date)
- Personal travel
- Short-term illness and doctor appointments (Flu, COVID, Strep, cold etc.,) (need doctor's note)

Dean of students will be only notified if the absences are due to

- Temporary disability or injury
- Extended medical absences or hospitalization
- Illness of a dependent family member
- Major illness or death of a loved one, which may include immediate family members of the student, spouses/partners, and others as deemed appropriate by the Dean of Students office
- Car accident that takes away transportation
- Housing emergencies
- Significant mental health concerns

Methods of Evaluation

Exams

The grade in this course is determined by the following categories of assessment:

There will be 5 exams for this course (4 in-class exams and a comprehensive final exam). All exams will count equally. The lowest score you earn on the first four in-class exams will be dropped, **but NOT the comprehensive final exam grade.** There will be no make-up exams, except in case of excused absences recognized by the University of North Texas (observation of religious holiday, military service or wherein a student is representing the university in an official capacity such as athletics or band). Medical emergencies may be considered but must be documented by a medical professional. **No one will be admitted to an exam after the first person has left that exam.**

Bring pencils with a decent eraser. NO OTHER ITEMS ARE PERMITTED DURING EXAMS. This includes smart watches and devices, lecture notes, "cheat sheets", etc. Hats are okay during exam time, but you will need to flip it backwards so that the brim of the hat is at the back of your head. Scantrons will be provided, so there is no need to get it yourself.

* Exam dates or coverage are subject to change, with reasonable advance notice. **PLEASE NOTE THAT THE CLASS TIME IS DIFFERENT FOR THE FINAL!**

Assignments

There will be 5 online assignments. All assignments are worth 10 points each. There will be no make-up assignments.

There will be 15% penalty per day for late submission. Please note the due date for each assignment from the class schedule.

In class and online activities

There will be activities during any time of the class covering the topics of the same day. Failure to attend the class will result in earning zero for that day. There may be few online activities that will be added to the in-class activity points.

The same questions may be asked during the exams.

Extra credit

There will be some extra credit assignments.

There are **500 total possible points**. Grades will be assigned based on how many cumulative points you earn in the class.

• 3 out of 4 exams, 100 pts each	300 pts (One Lowest grade dropped)
• Mandatory Final Exam (cumulative)	100 pts
• 5 Online assignments	50 pts
• In class and online (few) activities	50 pts

The grading scale for assigning letter grades in this course is as follows:

- A 450 and up
- B 449- 400
- C 399 -350
- D 349- 300
- F 299 and below

*Bonus points will be given in various assessments

*No late work will be accepted

Grade Reviews

If you have any questions about a graded item or believe there is an error in the grade, you must notify the instructor within 1 week after the grade is posted online. After this time, all grades are final and will not be reviewed. You can review up to 3 exams during my office hours. However, you can only review one exam at a time. You will not be allowed to review a previous exam after taking the next exam. For example, after taking Exam 2, you will not be able to review Exam 1. This is due to accommodating other students during my office hours. Please note that I offer 3 hours of office hours each week.

UNT Policies

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. In this course, each student is expected to work independently on all assignments unless specifically instructed otherwise by the instructor. Academic dishonesty (cheating) will not be tolerated. Students found to be cheating on any work in this course may receive a grade of zero on affected work, be removed from the course, and/or be reported to the university for additional disciplinary action.

ADA Policy

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website. You may also contact ODA by phone at (940) 565-4323.

Class Schedule

The tentative schedule may subject to change and will be informed by instructor via Canvas. **It is students' responsibility to check and prepare for due dates for exams and assignments in Syllabus.**

Week	Date	Days	Chapter	Topic
1	Jan 13	Tuesday	1	Syllabus and Course Introduction The Microbial World and You
	Jan 15	Thursday	1	The Microbial World and You
2	Jan 20	Tuesday	3 4	Observing Microorganisms Through a Microscope Functional Anatomy of Prokaryotic and Eukaryotic Cells
	Jan 22	Thursday	4	Functional Anatomy of Prokaryotic and Eukaryotic Cont. Census date -Jan 24, 2026
3	Jan 27	Tuesday	5	Microbial Metabolism
	Jan 29	Thursday	5	Microbial Metabolism Continues
4	Feb 3	Tuesday	6	Microbial Growth
	Feb 5	Thursday	7	The Control of Microbial Growth
	Feb 8	Sunday		Online assignment 1 due by 11:59 pm
5	Feb 10	Tuesday		Exam 1 (1, 3, 4, 5, 6)
	Feb 12	Thursday	20	Antimicrobial Drugs
6	Feb 17	Tuesday	20	Antimicrobial Drugs continues
	Feb 19	Thursday	10	Classification of Microorganisms
7	Feb 24	Tuesday	11	The Prokaryotes: Domains Bacteria and Archaea
	Feb 26	Thursday	11	The Prokaryotes: Domains Bacteria and Archaea
	Mar 1	Sunday		Online Assignment 2 due by 11:59 pm
8	Mar 3	Tuesday	12	The Eukaryotes: Fungi, Algae, Lichens, and Protozoa
	Mar 5	Thursday	12	The Eukaryotes: Fungi, Algae, Lichens, and Protozoa Cont.
9	Mar 9-13	Mon-Fri		Spring Break (NO classes)
10	Mar 17	Tuesday		Exam 2 (7, 20, 10, 11, 12)
	Mar 19	Thursday	13	Viruses
11	Mar 24	Tuesday	13 8	Viruses Cont. Microbial Genetics
	Mar 26	Thursday	8	Microbial Genetics Cont.
	Mar 29	Sunday		Online Assignment 3 due by 11:59 pm
12	Mar 31	Tuesday	8 14	Microbial Genetics Cont. Principles of Disease and Epidemiology
	Apr 2	Thursday	15	Microbial Mechanisms of Pathogenicity
13	Apr 7	Tuesday	21	Microbial Diseases of the Skin and Eyes
	Apr 9	Thursday	22	Microbial Diseases of the Nervous System Last day to drop with a W- Apr 10, 2026
14	Apr 14	Tuesday		Exam 3 (13, 8, 14, 15, 21)
	Apr 16	Thursday	24	Microbial Diseases of the Respiratory System
	Apr 19	Sunday		Online Assignment 4 due by 11:59 pm
15	Apr 21	Tuesday	25	Microbial Diseases of the Digestive System
	Apr 23	Thursday	26 27	Microbial Diseases of the Urinary & Reproductive System Environmental Microbiology
16	Apr 28	Tuesday	27 28	Environmental Microbiology Cont. Applied and Industrial Microbiology
	Apr 30	Thursday		Exam 4 (22, 24, 25, 26, 27)
	May 3	Sunday		Online Assignment 5 due by 11:59 pm
17	May 5	Tuesday		Final Comprehensive Exam (7:30 am-9:30 am)