



BSC 303 Cell Biology, 01E, CRN: 81952

COURSE SYLLABUS: Fall 2026

INSTRUCTOR INFORMATION

Instructor:	Dr. Venu Cheriya
Office Location:	STC 260A
Office Hours:	Mondays 1-3 PM or 4-5 PM
Office Phone:	903-468-8153
University Email Address:	Venu.cheriyath@etamu.edu
Preferred Form of Communication:	Email (Include BSC 303 Cell Biology in subject lines)
Communication Response Time:	24-48 hrs
Lectures:	M, W, F 9:00 – 9:50 AM
Location:	BA 221
Lab:	Mondays 1-3.50 PM or 4-6.50 PM in STC 216

COURSE INFORMATION

PRE-REQUISITES: BSC 1406, 1407 and CHEM 1312 Min Grade C

MATERIALS – TEXTBOOKS, READINGS, SUPPLEMENTAL READINGS

Textbook(s) Required: **Becker's World of the Cell, 10th Edition, by Hardin, Bertoni, and Kleinsmith, ISBN-13: 9780137441778**

We will cover most of the subject matter presented in this book, but not necessarily in order. Chapter assignments are listed on the Course Schedule. For some topics, this book presents more detail than we need; however, it omits some topics that will be discussed in the course.

Software Required: None

Optional Texts and/or Materials: None

COURSE DESCRIPTION

This course will provide a rigorous foundation in current cell biology so that advanced level cellular and molecular biology courses will be more meaningful. Without the recommended prerequisites and a good grasp of basic fundamentals of chemistry, this course will likely prove very difficult.

STUDENT LEARNING OUTCOMES

1. Identify the structure and functions of animal cells, organelles and their differences from prokaryotic cells.
2. Understand the chemical architecture of living cells and the functions of the major groups of biological molecules and how the information is passed from DNA to proteins.

The syllabus/schedule are subject to change.

3. Perform various cell staining techniques to observe cellular organelles under a microscope.
4. Assess the viability of cells, quantitate proteins and separate them on SDS-Gel.

COURSE REQUIREMENTS

MINIMAL TECHNICAL SKILLS NEEDED

A thorough understanding of materials and concepts covered in Introductory Biology I & II and Introductory chemistry courses are required.

INSTRUCTIONAL METHODS

This syllabus is a suggested outline of a face-to-face class and the minimum material covered in this course. Dates are approximate and subject to change. Any major changes to the syllabus will be posted in D2L and the syllabus will be updated accordingly. You are responsible for keeping up with any changes made to the syllabus. You may be tested on any material listed in the syllabus, on your class page, and discussed in the class.

Class Policies:

Attendance & Participation in Supplemental Instruction (50 points, 5% of total): Attendance in ALL classes and labs are expected. This course will follow active learning methods and your active participation in class activities are required for earning attendance and participation points. You may earn up to 25 points of total (2.5%) for not making more than 2 unexcused absences and another 25 points for active participation in supplemental instruction and class room activities. Attendance would be taken in the beginning of every class. If you are not present in most time of a class, it will be counted as an absence and you will lose points for both attendance and for participation. You are responsible for all material and assignments covered in class whether you are present or not.

Lecture Materials: Power Point slides that I use for delivering lectures will be available at D2L Brightspace, the e-companion site for this course. **However, I would like to make it very clear that Power Point slides are meant for me to deliver lectures and not to be treated as lecture notes. You may use it as a reference or guide to read the book but not as study material. If you just use the PowerPoint slides as study material instead of reading books, you may not perform good in tests.**

STUDENT RESPONSIBILITIES OR TIPS FOR SUCCESS IN THE COURSE

Your active and timely participation is essential for the successful completion of this course. As a 300 level class on Cell Biology, I expect that you have a thorough background in BSC 1406 (Biology I). You must read chapters prescribed for each week, attend class, and go through additional lecture materials, assignments and activities. I encourage you to clear any questions that you may have during lectures or during office hours.

GRADING

Final grades in this course will be based on the following scale:

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A = 90%-100%

B = 80%-89.9%

C = 70%-79.9%

D = 58%-69.9%

F = 57.9% or Below

Total points corresponding to the final letter grades

A = 900- 1000 Points

B = 800- 899 Points

C = 700- 799 Points

D = 580- 699 Points

F = 579 Or fewer

Weights of the assessments in the calculation of the final letter grade.

Example:

Weekly Quizzes	10% (100 points)
Three exams	37.5% (375 points)
Final Exam	22.5% (225 points)
Lab	25% (250 points)
Attendance and Participation	05% (50 points)
TOTAL	100% (1000 points)

ASSESSMENTS

Weekly Quizzes (100 points of total, 10%): Each week there will be a quiz which needs to be taken online in D2L Brightspace. Quizzes are due @ 11.59 PM on Thursdays or as indicated in D2L calendar. Each quiz will contain 10 questions and worth of 10 points. If you miss a quiz, there won't be any makeup quiz.

Exams and Grades: The lecture part of the course will weigh 75% and lab part will weigh 25% of the total. For the lecture part there will be three exams (125 points each) throughout the term and a cumulative final exam (225 points). Exams will be conceptual based and will test critical thinking, analytical ability, and the understanding of subject matter. Exams may include bonus questions will be based on problem sets. Therefore, it is important to understand the concepts to perform well in this course.

Course Outline/Calendar

Units	Date	Chapters	Topic
Unit 1	Aug 20 – Aug 28	Chapter 1	Introduction to Cell Biology
Quiz Due @	11.59 PM on Sept 03		

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Unit 2 Quiz Due @	Sept 1 – Sept 04 11.59 PM on Sept 10	Chapter 2	Chemical basis of life
Unit 3.1 Quiz Due @	Sept 07 – Sept 11 11.59 PM on Sept 17	Chapter 3	Macromolecules (Amino acids, Protein, and Nucleic Acids)
Unit 3.2 Quiz Due @	Sept 14 – Sept 18 11.59 PM on Sept 24	Chapter 3	Macromolecules (Carbohydrates and Lipids)

Exam I, September 25

Unit 4 Quiz Due @	Sept 21 – Sept 25 11.59 PM on Oct 01	Chapter 4	Cell and Organelles
Unit 5 Quiz Due @	Sept 28 – Oct 02 11.59 PM on Oct 07	Chapter 5	Bioenergetics
Unit 6 Quiz Due @	Oct 05 – Oct 16 11.59 PM on Oct 22	Chapter 6	Enzymology

Exam II, October 23

Unit 7 Quiz Due @	Oct 19 – Oct 23 11.59 PM on Oct 29	Chapter 7	Membranes, Function, & Chemistry
Unit 8 Quiz Due @	Oct 26 – Oct 30 11.59 PM on Nov 05	Chapter 8	Membrane transport
Unit 9 Quiz Due @	Nov 02 – Nov 06 11.59 PM on Nov 12	Chapter 13	Cytoskeleton

Exam III, November 13

Unit 10 Quiz Due at 11.59 PM on Nov 25	Nov 09 – Nov 20	Chapter 15	Cell adhesion & Cell junctions
Unit 11 Quiz Due @	Nov 23 – Dec 04 11.59 PM on Dec 04	Chapter 16	DNA, Chromosomes & Nucleus

Final Exam, Dec 09, Wednesday 8–10 AM

ALL DATES AND ASSIGNMENTS ARE TENTATIVE AND MAY SUBJECT TO CHANGE

The syllabus/schedule are subject to change.

TECHNOLOGY REQUIREMENTS

LEARNING MANAGEMENT SYSTEM (LMS)

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online (D2L Brightspace) LMS. Below are the technical requirements:

- [LMS Requirements](#)
- [LMS Browser Support](#)
- [Zoom Video Conferencing Tool](#)

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@etamu.edu.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

TECHNICAL SUPPORT

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or view [other support options](#).

STUDENT RESPONSIBILITIES FOR THE COURSE

CWID AND PASSWORD

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@etamu.edu.

TECHNOLOGY-RELATED ISSUES

Personal computer and internet connection problems do not excuse the requirement to complete all coursework in a timely and satisfactory manner. Each student needs a backup method to handle these inevitable problems. These methods might include having a backup PC at home or work, temporarily using a computer at a friend's home, at the local library, at office service companies, at Starbucks, or at an ETAMU campus open computer lab.

TECHNOLOGY REQUIREMENTS AND SUPPORT

MINIMAL TECHNICAL SKILLS NEEDED

Students will need a reliable computer and internet access for this course. Students must be able to use myLeo email, myLeo Online (D2L Brightspace), and Microsoft Office effectively.

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LEARNING MANAGEMENT SYSTEM (LMS) – D2L Brightspace

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements:

- View the [Learning Management System Requirements Webpage](#).
- Learn more on the [LMS Browser Support Webpage](#).

TECHNICAL SUPPORT

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found on the [Brightspace Support Webpage](#).

COMMUNICATION AND SUPPORT

INTERACTION WITH INSTRUCTOR STATEMENT

If you have any questions or are having difficulties with the course material, please contact your instructor. Correspondence will always be through university email (your “myLeo” mail), and announcements will be posted in myLeo online (D2L Brightspace). You will not RECEIVE email through Brightspace, so be sure to check your ETAMU email for communication. Students are encouraged to check their university email daily.

INCLUDE THE FOLLOWING IN EMAILS WITH INSTRUCTOR:

- Course name and subject in the subject line
- Salutation (Good afternoon, Dr. Jackson)
- Proper email etiquette (no “text” emails – use proper grammar and punctuation)
- Student name and CWID after the body of the email (possibly add to student signature on email)

COURSE AND UNIVERSITY PROCEDURES/POLICIES

SYLLABUS CHANGE POLICY

The syllabus is a guide. Circumstances and events, such as student progress, may necessitate the instructor's modification of the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

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STUDENT CONDUCT

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The [Code of Student Conduct](#) is described in detail online in the [Student Guidebook](#).

Students should also consult the [Rules of Netiquette Webpage](#) for more information regarding how to interact with students in an online forum.

ETAMU ATTENDANCE

For more information about the attendance policy, please view the [Attendance Webpage](#) and the [Class Attendance Policy](#).

ACADEMIC INTEGRITY

Students at East Texas A&M University are expected to maintain high standards of integrity and honesty in all their scholastic work. For more details and the definition of academic dishonesty, see the following procedures:

[Undergraduate Academic Dishonesty University Procedure 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

[Graduate Student Academic Dishonesty University Procedure 13.99.99.R0.10](#)

[Graduate Student Academic Dishonesty Form](#)

USE OF ARTIFICIAL INTELLIGENCE

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that have the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided, the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources

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STUDENTS WITH DISABILITIES-- ADA STATEMENT

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides reasonable accommodations for their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

East Texas A&M University

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@etamu.edu

Website: [Office of Student Disability Services](#)

NONDISCRIMINATION NOTICE

East Texas A&M University will comply in the classroom and in online courses with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

CAMPUS CONCEALED CARRY STATEMENT

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and ETAMU Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M University campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

EAST TEXAS A&M SUPPORTS STUDENTS' MENTAL HEALTH – COUNSELING SERVICES

The Counseling Center at East Texas A&M University, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connections to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit the [Counseling Center website](#).

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MENTAL HEALTH AND WELL-BEING

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code or [download the app](#) and explore the resources available to you for guidance and support whenever you need it.



As an Institutional Member of the National Association of Schools of Music, East Texas State A&M University supports the Association's commitment to student health and wellness. The [Musician Health and Safety - East Texas A&M University](#) website provides links to information and resources on physical and mental well-being and offers preventive measures students can take to avoid serious and/or chronic conditions.

DEPARTMENT AND ACCREDITING AGENCY STATEMENT:

The syllabus/schedule are subject to change.