



PHYS 401 – Current Topics in Physics and Astronomy

COURSE SYLLABUS: Spring 2026

INSTRUCTOR INFORMATION

Instructor: Dr. Carlos Bertulani

Office Location: Science Building room 140

Office Fax: 903-886-5480 (Department of Physics and Astronomy)

University Email Address: carlos.bertulani@etamu.edu

Preferred Form of Communication: email

Communication Response Time: within 24 hours

COURSE INFORMATION

Materials – Own student notes from colloquium presentations.

Software Required: None. Students do not need to have access to a computer with internet connection.

Optional Texts and/or Materials:

None

Course Description

This is a University Science course. The interdisciplinary application of scientific principles is emphasized. The scientific principles developed in this course primarily include topics typically covered in physical science. Connections and applications of these principles to the other sciences are examined. Science is an interesting and diverse topic; it is the colloquium presenter's intent to demonstrate that learning can be enjoyable as well as educational. Science is what allows mankind to function in a productive manner.

Student Learning Outcomes

- Students will gain a better understanding of concepts in Physics and Astronomy.
- Students will better understand scientific processes and test for further scientific knowledge.
- Students will understand the conceptual differences between facts, theories, and laws.
- Students will be able to compare the separate science disciplines and make integrative connections.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students will need NOT computer access to complete various assignments. **Important:** There is an assumption that participating students have the basic computer skills needed to prepare a PDF summary of the presenter's talk:

- For each talk, you must submit a summary of at least 200 words.
- Include the speaker's name, title of the talk, and the date before your summary.
- Use your own words to describe what you learned - copied content will not be accepted.
- Compile all summaries into a single PDF document and email it to me no later than **December 5th, 5:00 pm**.

Instructional Methods

Students will access myLeo online (D2L) system only for the final grade.

To get started with the course, go to: <http://www.tamuc.edu/myleo.aspx>.

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamuc-commerce.edu.

Student Responsibilities or Tips for Success in the Course

Students must check on myLeo online (D2L) if their student information is correct.

GRADING

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

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

Grading Procedure

Comprehensive final assignment: 100%

TECHNOLOGY REQUIREMENTS

LMS

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 technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

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@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

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. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

Interaction with Instructor Statement

The instruction will respond within 24 hours by email. Each graded assignment and test will be returned within a week.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

General Classroom

Students are expected to be on time and present for all colloquium presentations. If an emergency results in an absence, the student should contact the instructor as soon as possible informing the instructor of the emergency and inquiring about ways to make up the missed class. The instructor will make judgment on how to handle the situation. Possible reasons for excused absence are listed in the "Student's Guidebook" under class attendance policy. Attendance and tardy records will be maintained and both may result in deductions from your overall grade. Three unexcused absences will automatically result in a failing grade.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

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 in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

ETAMU Supports Students' Mental Health

The Counseling Center at ETAMU, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection 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

www.tamuc.edu/counsel

AI use policy [Draft 2, May 25, 2023]

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has 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.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

Academic Integrity

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

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

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

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

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

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 for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

East Texas A&M University

Gee Library- Room 162

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

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

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

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

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.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

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

COURSE OUTLINE

1. Attendance:

- Attendance is mandatory. A sign-in sheet will be available at each session - please ensure you sign it.
- More than two unexcused absences (without medical or valid justification) will result in a grade of F.

2. Participation:

- Asking questions during the colloquium is encouraged and rewarded with extra points. Participation is key!
- There are no "stupid" questions as long as they are relevant to the speaker's topic. Be curious and engage.

3. Summaries of Talks:

- For each talk, you must submit a summary of at least 200 words.
- Include the speaker's name, title of the talk, and the date before your summary.
- Use your own words to describe what you learned - copied content will not be accepted.
- Compile all summaries into a single PDF document and email it to me no later than **April 23rd, 5:00 pm**.
- To avoid last-minute stress, I recommend writing and saving each summary soon after the talk.

2. Engage with Visitors:

- Take advantage of the visiting speakers' presence on campus.
- Feel free to ask questions directly to the speakers after the talks. This can be a valuable networking opportunity, and you might discover a future career path or collaboration with their institutions.

3. Code of Conduct:

- Be respectful to your colleagues, the speakers, and everyone involved. Display good manners and patience.