Online/Blended Course Syllabus

Course Information

Course Number/Section	PHYS 1100.001
Course Title	Fun of Physics
Term	Fall 2020

Professor Contact Information

Professor	Matthew Goeckner
Office Phone	972-883-4292
Other Phone	972-883-4293
Email Address	Goeckner@utdallas.edu
Office Location	SCI 3.237c or NSERL 3.408
Online Office Hours	9-4 M-F or by appointment
Other Information	www.utdallas.edu/~goeckner

Note: *state time/day and how office hours will be held, e.g. BlackBoard Collaborate, MS Teams, or WebEx (add appropriate links) and/or phone call – optional; please ensure student's identity in adherence to FERPA*

Course Modality and Expectations

Instructional Mode	This class will be taught remotely. (Videos will be available ASAP via eLearning)
Course Platform	This will be given via MS Teams, or WebEx. Recordings will be via eLearning (Blackboard)
Expectations	You are expected to participate in lectures. (Ask questions) After each lecture you are to write a brief (~ 1 page.) synopsis of the talk.
Asynchronous Learning Guidelines	If you cannot watch the lecture live – you are still expected to watch it later and write a brief (~ 1 page.) synopsis of the talk.

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record.

Please see http://go.utdallas.edu/syllabus-policies.

Class Participation

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

The instructor may record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Materials

The Instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Course Pre-requisites, Co-requisites, and/or Other Restrictions

None

Course Description

PHYS 1100 The Fun of Physics (1 semester credit hour) An introductory course in physics in the modern world. Focuses on the work of a physicist. What does a physicist do? What are some of the exciting topics on which physicists are working today? The faculty discusses

their favorite concepts and the opportunities for student participation in research. Credit/No Credit only.

- The purpose of this class is to introduce students to the research that is going on at the Physics Department in UTD, to introduce them to faculty and other researchers in the Department, and in doing so to inform students about what it means to be a physicist.
- The first class will give an overview of the physics department and introductions of students in the class will be made to encourage camaraderie and to facilitate student discussions after class.
- During each subsequent class, one of the UTD physics faculty or researchers will describe the research that he/she is doing. These presentations will cover diverse topics in experimental and theoretical physics research. Cutting edge physics research on scales ranging from the smallest constituents of matter to the largest structures in the Universe will be presented.
- There are limited class assignments for the course. A couple of professors may ask for a little preparation work to be done before their class. All are expected to write a brief synopsis of each lecture and turn that in the following week.

Student Learning Objectives/Outcomes

- An objective of this course is that the student receives an introduction to a variety of topics in the subject of physics, and an introduction to the Physics Department of UTD.
- Since many students are aspiring to be physics majors, an outcome of this course is that they will learn something about different areas of physics, and hence get an insight into what exactly it is that physicists do.
- Questions are greatly encouraged.

Required Textbooks and Materials

Required Texts

None

Required Materials

None

Suggested Course Materials

Suggested Readings/Texts

Varies from speaker to speaker

Suggested Materials

Varies from speaker to speaker

Textbooks and some other bookstore materials can be ordered online or purchased at the UT Dallas Bookstore.

Technical Requirements

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage.

Course Access and Navigation

This course can be accessed using your UT Dallas NetID account on the eLearning website.

Please see the course access and navigation section of the webpage for more information.

To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Communication
This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the Student eLearning Tutorials webpage for video demonstrations on eLearning tools.

Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

Distance Learning Student Resources
Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student AccessAbility, and many others. Please see the eLearning Current Students webpage for more information.

Server Unavailability or Other Technical Difficulties
The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online eLearning Help Desk. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

Academic Calendar

WEEK DATE	FACUTLY LECTURE	GENERAL FIELD (Specific area)
1 18-Aug-20	Dr Matthew Goeckner	An overview of the department And how to study…
2 25-Aug-20	Dr David Lary	Space Sciences Physics in Service of Society
3 1-Sep-20	Dr Lindsay King	Astrophysics
4 8-Sep-20	Dr Kaloyan Penev	Astrophysics
5 15-Sep-20	Dr Xiaoyan Shi	Condensed matter Temperature and Physics
6 22-Sep-20	Dr Jason Slinker	Biophysics
7 29-Sep-20	Dr Michael Kolodrubetz	Condensed matter Universality in non-equilibrium quantum systems.
8 6-Oct-20	Dr Mark Lee	Condensed matter

WEEK DATE	FACUTLY LECTURE	GENERAL FIELD (Specific area)
9 13-Oct-20	Dr Bing Lv	Condensed matter Experimental quantum materials research for our energy relevant future
10 20-Oct-20	Dr Phillip Anderson	Space Sciences
11 27-Oct-20	Dr Michael Kesden	Astrophysics
12 3-Nov-20	Dr Roger Malina	Fundamental Science Applying concepts of quantum mechanics to social problems
13 10-Nov-20	Dr Russell Stoneback	Space Sciences Satellites and Music
14 17-Nov-20	Dr Mustapha Ishak-Boushaki	Astrophysics Probing cosmic acceleration, dark energy and Einstein's gravity at cosmological scales.
15 24-Nov-20	Dr Chuanwei Zhang	Condensed matter Quantum computer
16 Finals week	No final in this course	

Proctored Final Exam Procedures

N/A

Grading Policy

Weekly synopsis of talks of previous lectures	100%
Total	**100%**

Grade Scale:

A+: 97-100; A: 93-96; A−: 90-92; B+: 87-89; B: 83-86; B−: 80-82; C+: 77-79; C: 73-76; C−: 70-72; D+: 67-69; D: 63-66; D−: 60-62; F: below 60.

Course Policies

Weekly synopsis of talks due the week following all talks (e.g. due the following Tuesday). These should be loaded into eLearning. This is to be a "completion" grade. I am just looking to see that you have written something on topic – and roughly of 1 page in length. (So, a few details but not much.)

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students.

Please go to Academic Support Resources webpage for these policies.

UT Dallas Syllabus Policies and Procedures
The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to UT Dallas Syllabus Policies webpage for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.