

PHY1033C

DISCOVERING PHYSICS (P) - FALL 2022

CLASS TIME & PLACE: T 6-7 & R 6 Period, Room NPB 1002.

Instructor: [Neil Sullivan](#)

Office: NPB #2235

Email: sullivan@phys.ufl.edu (Preferred form of contact)

Office Hours:

M and W: 7th P. Feel free to email for a zoom appointment outside office hours

Communications: via email or Canvas announcements

Class Comportment: Students should observe a professional "etiquette" when participating in class discussions or office hours whether f2f or by zoom.

REQUIRED TEXTBOOK:

["Physics for Poets"](#) (5th Ed.) by Robert H. March; (McGraw Hill, publisher)

RECOMMENDED REFERENCES:

["Einstein's Cosmos: How Albert Einstein's Vision Transformed Our Understanding of Space and Time \(Great Discoveries\)"](#) by Michio Kaku (W.W. Norton, publisher)

["Great Experiments in Physics: First hand accounts form Galileo to Einstein"](#) (2nd Edition) by M.H. Shamos (Editor); (Dover Publications, NY)

PREREQUISITES: None

MATERIALS AND SUPPLIES FEE: none

REQUIRED TECHNOLOGY: Students will need a personal computer and good internet connections as well as standard text writing software such as Microsoft Word and Adobe Reader that will be needed to submit reports. Students may need to be able to use Zoom for class access if f2f classes are canceled.

MATERIALS FOR ACTIVITIES: For the Fall 2021 semester, in-class experiments are planned for Tuesdays. Students will write up each experiment (including description, aims, results, analysis, and conclusion) using a PC and a PDF copy entered via Canvas before the due date (see schedule and calendar). [Alternatively, students can write up the experiments using a 5x5 quad ruled notebook which is to be handed in on the Thursday following the experiment.]. It is anticipated that absences due to COVID and quarantining will occur and students will be able to request make up experiments by carrying out "Home Experiments" that will be made available with a full set of instructions. (Should f2f classes become canceled, on-line instructions for "Home Experiments" will be provided.)

COURSE DESCRIPTION

An overview of the great ideas about the laws of the Universe that shape our daily lives, ranging from the quantum revolution that has led to magnetic resonance imaging and the modern electronics of our cell phones, to the structure and evolution of our Cosmos.

EXPECTATIONS:

It is expected that students read textbook chapters thoroughly at least once preferably before the class and review lecture notes (available on Canvas). Students should work on homework problems diligently. The laboratory experiments are part of the course and the final grade. Short homework essays on topics may also be assigned.

GRADING POLICIES AND GRADE SCALE:

Assigned work: In addition to short homework problems, short essays will be assigned on topics covered in the course.

Homework: Selected HW problems and writing assignments will be tested in the exams.

In-class Quizzes: There will be about 4 in-class quizzes. 15 mins will be given for each quiz. The due dates are given in the course calendar (the dates can change if the calendar is extended).

Exams: There will be one Midterm exam (in class period) and one Final exam (not cumulative). Some exam material will involve writing in addition to elementary problem solving. Please check the **Course Calendar** for the exam times and dates.

Policy on missed Exam or Quiz:

For missed assignments or quizzes students should submit a justification (such as medical or family emergency) and request (by email to instructor) a makeup assignment. The makeup policy is consistent with university policies that can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Grade Return Timing: In normal operations students should expect grades to be returned within 10 days.

Composition of Grade (Total 100)

<i>Quizzes</i>	10
<i>Homework</i>	25
<i>Laboratory</i>	15
<i>Mid Term</i>	25
<i>Final</i>	25

Projected Grading Scale*

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-
G. Pt.	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67
Score	>= 94	>= 90	>=87	>= 84	>= 80	>= 77	>= 74	>= 70	>= 67	>=64	>=61

*The passing grade for Physics majors is C and above. The actual grading scale may vary depending on numerous factors within +/- 2.5 points out of 100.

DIVERSITY STATEMENT

It is the intent that students from diverse backgrounds and perspectives will be well-served by this course, and that the diversity that students bring to this class will be a resource, strength and benefit to all. It is the intent to present materials and activities that are inclusive and respectful of all persons, no matter their gender, sexual orientation, disability, age, socioeconomic status, ethnicity, race, culture, perspective, and other background characteristics.

UF POLICIES SHAPING THIS COURSE

- Contact Hours: "Contact Hours" refers to the hours per week in which students are in contact with the instructor, excluding office hours or other voluntary contact. The number of contact hours in this course equals the number of credits the course offers.
- Workload: As a Carnegie I, research-intensive university, UF is required by federal law to assign at least 2 hours of work outside of class for every contact hour. Work done in these hours may include reading/viewing assigned material and doing explicitly assigned individual or group work, as well as reviewing notes from class, synthesizing information in advance of exams or papers, and other self-determined study tasks.
- Accommodation for Student with Disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. This class supports the needs of different learners; it is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

- **Statement Regarding Evaluations:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available from [the Gatorevals website \(Links to an external site.\)](#). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [the evaluation system. \(Links to an external site.\)](#) Summaries of course evaluation results are available to students at the [public results website \(Links to an external site.\)](#).
- **Statement Regarding Course Recording:** Our class sessions may be audio visually recorded for students in the class to refer back to and for use of enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded. If you are unwilling to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

ADDITIONAL UF POLICIES AND RESOURCES

The following are additional policies that shape my approach to teaching.

UF students are bound by The Honor Pledge which states, *“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (sccr.dso.ufl.edu/process/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.*

UNIVERSITY POLICE

The UF police are together for a safe campus. 392-1111 (or 9-1-1 for emergencies)
[:http://www.police.ufl.edu/.](http://www.police.ufl.edu/)

COUNSELING and WELLNESS Center

[Counseling and Wellness Center](#) (352-392-1575) provides counseling and support as well as crisis and wellness services including a [variety of workshops](#) throughout the semester (e.g., Yappy Hour, Relaxation and Resilience).

Career Connections Center

[The Career Connections Center](#) (352-392-1601 | CareerCenterMarketing@ufsa.ufl.edu) connects job seekers with employers and offers guidance to enrich your collegiate experience and prepare you for life after graduation.

Dean of Students Office:

[The Dean of Students Office \(Links to an external site.\)](#) (352-392-1261) provides a variety of services to students and families, including [Field and Fork](#) (UF's food pantry) and [New Student and Family programs](#).

Disability Resource Center

[The Disability Resource Center \(DRCaccessUF@ufsa.ufl.edu | 352-392-8565\)](#) helps to provide an accessible learning environment for all by providing support services and facilitating accommodations, which may vary from course to course. Once registered with DRC, students will receive an accommodation letter that must be presented to the instructor when requesting accommodations. Students should follow this procedure as early as possible in the semester.

Multicultural and Diversity Affairs

[Multicultural and Diversity Affairs \(Links to an external site.\)](#) (352-294-7850) celebrates and empowers diverse communities and advocates for an inclusive campus.

Office of Student Veteran Affairs

[The Office of Student Veteran Services \(Links to an external site.\)](#) (352-294-2948 | vacounselor@ufl.edu) assists student military veterans with access to benefits.

ONE.UF

[ONE.UF \(Links to an external site.\)](#) is the home of all the student self-service applications, including access to:

- [Advising \(Links to an external site.\)](#)
- [Bursar \(Links to an external site.\)](#) (352-392-0181)
- [Financial Aid \(Links to an external site.\)](#) (352-392-1275)
- [Registrar \(Links to an external site.\)](#) (352-392-1374)

Official Sources of Rules and Regulations

The official source of rules and regulations for UF students is the [Undergraduate Catalog \(Links to an external site.\)](#) and [Graduate Catalog \(Links to an external site.\)](#). Quick links to other information have also been provided below.

- [Student Handbook \(Links to an external site.\)](#)
- [Student Responsibilities \(Links to an external site.\)](#), including academic honesty and student conduct code
- [e-Learning Supported Services Policies \(Links to an external site.\)](#) includes links to relevant policies including Acceptable Use, Privacy, and many more
- [Accessibility \(Links to an external site.\)](#), including the Electronic Information Technology Accessibility Policy and ADA Compliance
- [Student Computing Requirements \(Links to an external site.\)](#), including minimum and recommended technology requirements and competencies