

**PHYSICS 100**  
**SURVEY OF PHYSICS**  
SPRING 2022 / ON-LINE / WRITTEN LECTURE NARRATIVES

No In-Person Meetings  
MWF, 1:30 pm - 2:20 pm  
January 10 – May 13  
Last Day of Instruction / May 4

**Instructor**

Dr. Chester Vause  
Professor, Department of Physics & Astronomy  
Watanabe Hall 434, 808-956-2989, [cvause@hawaii.edu](mailto:cvause@hawaii.edu)

**Textbooks (Required)**

- (1) Science 101: PHYSICS, Barry Parker (Harper Collins 2007)
- (2) Basic Physics, A Self-Teaching Guide (3<sup>rd</sup> edition), Karl F. Kuhn, Frank Noschese (Jossey-Bass, A Wiley Brand 2020)

**Topics (Chapters)**

<u>Science 101</u>	<u>Basic Physics</u>
Ready Reference	Appendix A and B
1	1, 2, 3
2	4
4, 5	5, 6, 7, 8, 9
3, 6	10, 11, 12
7	13, 14, 15, 16, 17
8, 9	18, 19
XXX	20, 21, 22
10, 11, 12, 13, 14	XXX

Omitted sections in chapters may be announced as needed. Selected topics in other chapters may be included, time permitting.

**Student Learning Outcomes**

Among the student learning outcomes of this course are the abilities to:

- (a) Formulate and use the scientific method
- (b) Develop analytical skills for problem solving
- (c) Survey a broad landscape of physical phenomena and descriptive models
- (d) Understand how diverse physical properties fit into unifying physical theories

**Exams**

Exams are TAKE-HOME EXAMS. The schedule is below, and is subject to change. Instructions will be given on the exam cover page. Basically, one uses the textbook, lectures notes, your own personal notes, and a calculator. No other sources of material are allowed. By taking these exams, you are abiding to the conditions set forth. The exams will be sent as a pdf file. It is preferable that your finished exam be scanned and returned

to the instructor as a pdf file. If this is not possible, paper copy may be delivered to the instructors office, as will be noted in the specific exam directions.

Exam 1        Friday February 11, 2022  
Exam 2        Friday March 25, 2022  
Exam 3        Friday April 29, 2022  
Final Exam    NO FINAL EXAM scheduled

Each Exam is based on material covered since the previous Exam. Each Exam is given equal weight (1/3):

$$\text{TOTAL SCORE}(\%) = (\text{EX1}(\%) + \text{EX2}(\%) + \text{EXAM3}(\%))/3$$

$\pi$

### **Grade Scale**

Letter grade is determined from the total score according to the following scale:

A- (86%-90%)	A (91%-95%)	A+ (96%-100%)
B- (61%-70%)	B (71%-80%)	B+ (81%-85%)
C- (31%-40%)	C (41%-50%)	C+ (51%-60%)
	F (0%-20%)	D (21%-30%)

*NO INCOMPLETE GRADE GIVEN*

### **NOTICE**

The written lecture narratives are the intellectual property of the instructor, and are for your personal use only. It is not to be shared or distributed to any one in any form, in any media.

Be prepared to take the exams as assigned. This is not negotiable. If you have time conflicts, decide if this course is your first priority. I do not “work around” student’s personal plans and schedules (work, travel and otherwise).