

PHYS 122 INTRODUCTION TO RELATIVITY

OFFERED ONLINE IN FALL 2020

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NOTE: Assigned lectures on Blackboard Collaboration Ultra in Caps

All readings are in Einstein, RELATIVITY, Routledge 2001

(EINSTEIN'S RELATIVITY by James Trefil may prove to be a useful companion to the required text)

Dates of assignments should be understood as 'in the week of'

August 24

INTRODUCTION/NEWTON

CH 1-3

ELECTRICITY AND MAGNETISM

August 31

OPTIONS

TIME DILATION

CH4-10

TAYLOR SERIES

LENGTH CONTRACTION

Sept. 7

TESTS OF SPECIAL RELATIVITY

CH11-16

QUIZ #1— 9:00 AM Sept 10

Sept. 14

FICTITIOUS FORCES

CH 18-28

A MATHEMATICAL ASIDE

TESTS OF GENERAL RELATIVITY

Sept. 21

GRAVITATIONAL WAVES AND BLACK HOLES

EXAM#1 — 9:00 AM Sept 24