RICHLAND COLLEGE DEPARTMENT OF PHYSICS
School of Science, and Health Professions
Course Syllabus For
Phys 1403: Stars & Galaxies
4 credit hours (3 lec/3 lab)

INSTRUCTOR’S INFORMATION
(Instructor reserves the right to amend this information as necessary.)

Semester and Year: Fall 2019

Section: 81401 Class time and days: MTWRFSU Room: Online

Instructor: H. Appleby Contact Info: H.Appleby@dcccd.edu
Office hours: W & F 10 – 11 a.m.; T 9:30 – 12:20; R 11 – 12:20, Science Corner T 9:45 – 10:45

Last date to withdraw: Thursday, Nov. 14, 2019

Final Exam Day and time: Tuesday, Dec. 10th, 2019, online (2 hours, between 12:05 a.m. and 11:55 p.m.)

Evaluation Procedures:
Daily 15%
Lab 20%
Three best tests grades 45% (15% each)
Comprehensive Final 20%

Attendance Policy: I highly recommend attending all classes. I will allow you to turn in one (1) homework paper late if it is less than 1 weeks late and will not allow make-up pop quizzes.

Required Materials:
21st Century Astronomy, 6th ed., Kay, Palen, & Blumenthal w/ SmartWork, ISBN 978-0-393-69124-5, Norton (SmartWork access/registration code and Student Set ID will be found on eCampus syllabus)

Units of Instruction/Class Calendar:
Module 0 – Class Prep., Introductory and course orientation materials, SmartWork material
Module 1 – Background, Ch. 1, Ch. 2.1, Ch. 3.2 & 3.4, Ch. 4.1-4.3, Ch. 5.
Module 2 – Stellar Birth & Basics, Ch.7, Ch. 13, Ch. 14, Ch. 15
Module 3 – Stellar Stages, Ch. 16, Ch. 17, Ch. 18
Module 4 – Galactic Basics Ch. 19, Ch. 20, Ch. 21
Module 5 – Cosmology, Ch. 22, Ch. 23
Module 6 – Life “Out There” Ch. 24
Full calendar on eCampus

Instructor Policies and Suggestions for Student Success:
Etiquette: Professional and mature behavior is expected at all times, both in and out of class, in-person or via electronic means, towards all members of the class.

College Policies and Procedures:
CATALOG COURSE DESCRIPTION
This course concerns fundamental properties of stars, stellar systems, star clusters, nebulae, interstellar gas and dust, and galaxies. Included is the study of the sun, Milky Way Galaxy, stellar evolution, black holes, and current cosmological ideas. The laboratory includes outdoor viewing sessions and the study of timekeeping, use of spectra, and motions of stars and galaxies.

PREREQUISITES
Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading.

COURSE OBJECTIVES
To understand and apply a method and appropriate technology to the natural sciences; to recognize scientific and quantitative methods and the differences between them these approaches and other methods of inquiry; to communicate findings, analyses, and interpretation both orally and in writing; to recognize the influences and contribution of science to modern culture.

CORE CURRICULUM STATEMENT
1. Reading: The ability to read and interpret a variety of printed materials – books, articles, and documents – above a 12th grade level.
2. Speaking: Communicate orally in clear, coherent and persuasive language appropriate to purpose, occasion, and audience – above a 12th grade level.
3. Listening: Analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, and reading – above a 12th grade level.
4. Critical thinking: Think and analyze as a critical level.
5. Computer literacy: Understand our technological society, use computer-based technology in communication, solving problems, and acquiring information.