BREVARD COMMUNITY COLLEGE AEROSPACE TECHNOLOGY PROGRAM

COURSE: PSC 1341 PHYSICAL SCIENCE FOR TODAY'S WORLD

PRE-REQUISITES: None

INSTRUCTOR:

CONTACT DATA:

TEXTBOOK: <u>Integrated Science</u>, by Tillery, Enger, and Ross, McGraw-Hill

4th Edition, 2008

COURSE DESCRIPTION:

A survey of the principal physical, chemical and biological aspects of our natural environment and how these aspects are investigated. Topics include: the Metric System, Motion, Forces, Energy, Waves, and Properties of Matter, Atomic Structure, Nuclear and Chemical Reactions, and the Properties of Life. Although there is a math component to the course, the emphasis is on scientific concepts and their applications.

COURSE OBJECTIVES AND COMPENTENCIES:

At the end of this class the student will be able to:

Give a basic understanding of the physical and chemical aspects of his/her natural environment.

COURSE WORK:

WEEK	PRESENTATION	EVALUATION
1	Chapter 1: What is Science?	No Quiz
2	Chapter 2: Motion	Quiz #1 on Ch 1
3	Chapter 3: Energy Chapter 4: Heat and Temperature	Quiz #2 on Ch 2
4	Chapter 5: Waves Motions and Sound Chapter 6: Electricity	Quiz #3 on Ch 3 & 4
5	Chapter 7: Light Chapter 8: Atoms and Periodic Properties	Quiz #4 on Ch 5 & 6
6	Chapter 9: Chemical Reactions Chapter 10: Water and Solutions	Quiz #5 on Ch 7 & 8
7	Chapter 11: Nuclear Reactions	Mid-Term Exam on Ch 1 through Ch 11
8	Chapter 12: The Universe Chapter 13: The Solar System	No Quiz
9	Planetarium Field Trip	No Quiz
10	Chapter 14: The Earth in Space	Quiz #6 on Ch 12 & 13

Chapter 15: Earth Chapter 16: Earth's Surface 11 Chapter 17: Earth's Weather Quiz #7 on Ch 14, 15, and 16 Chapter 18: Earth's Waters 12 Chapter 19: Organic and Biochemistry Quiz #8 on Ch 17 & 18 Chapter 20: The Nature of Living Things 13 Chapter 21: The Origin and Evolution of Life Quiz #9 on Ch 19 & 20 Chapter 22: The History of Life on Earth 14 Chapter 23: Ecology and the Environment Quiz #10 on Ch 21 & 22 Chapter 24: Human Bio: Mat. Exchange & Cntr 15 Chapter 25: Human Bio: Sex and Nutrition Quiz #11 on Ch 23 & 24 Chapter 26: Mendelian & Molecular Genetics 16

GRADING PROCEDURE:

Missing three classes may mean withdrawal from the course.

Read the chapters before coming to class and bring your textbook (the lectures and discussions will follow the book).

Final Exam on Ch 12 through Ch 26

- Homework is due the week after assigned.
- The material covered in the exams will be from the chapter readings, lectures, labs, and field trips.

Bring to every class: Textbook

Notebooks for notes to be taken in class

Scientific calculator (functions include: log, 10^x, x^y, sin, cos)

GRADING: Exams 500 points (Midterm=250 points., Final=250 points)

(highest: 10 @ 10 points each) Homework 100 points Weekly Quizzes 400 points (highest 10 @ 40 points each)

1,000 points Total

A = 900 - 1,000 pointsB = 800 - 899 pointsC = 700 - 799 pointsD = 600 - 699 pointsF = 0 - 599 points

GRADING SCALE, ATTENDANCE POLICY AND WITHDRAWL POLICY WILL BE IN ACCORDANCE WITH THE STUDENT HANDBOOK AND COLLEGE CATALOG.