 **Judson International School**

**Biology 2**

**Course Description**: Biology 2 is an advanced, second-year biology class.  Students will study five major areas:  (1) marine biology (with emphasis on Southern California waters) (2) microbiology, (3) genetics, (4) comparative anatomy, and (5) career studies. Students will travel to such places as hospitals (Pomona Valley Medical Center and City of Hope in Duarte), universities (Loma Linda Medical School), labs (San Jose Water Treatment Plant in Whittier, Red Cross Blood Labs in Pomona and Marine Mammal Care Center in San Pedro), schools/work places (John Tracy Hear Clinic, East San Gabriel School and AMR in Rancho Cucamonga), and an overnight marine biology trip to Catalina.   Guest speakers (Manuel Munoz [forensics with L.A. Sheriff], Linda Putz [L.A. Sheriff] and Dee Dirks, R.N./midwife) will visit and instruct the class.  Advanced labs and out-of-class projects will reinforce the areas of studies.

**Prerequisite:** Biology 1

**Student Responsibilities:** Biology 2 students will be trained and certified in CPR and First Aid.  Students will return to Biology I on a periodic basis to assist beginning students with their labs.  Students will also have an on-going study of scientific vocabulary.  Students will be responsible for researching topics throughout the year and at times will teach portions of the Biology 2 class.

**Texts:**

How to Know the Protozoa, by Jahn, Bovee, and Jahn, Wm. C. Brown

            Company Publishers, 1979

Gifted Hands – The Ben Carson Story,  by Ben Carson with Cecil Murphey, Zondervan Publishing House, 1991

  Abraham Lincoln’s DNA and other Adventures in Genetics, by Philip R. Reilly, Cold Spring Harbor Laboratory Press Publishing, 2000

 The Human Genome Project:  What Does Decoding DNA Mean for Us? by Kevin Alexander Boon, Enslow Publishers, Inc., 2002

 Exploring the History of Medicine, by John Hudson Tiner, Master Books Publishing, 1999

Human Anatomy Coloring Book, by Margaret Matt and Joe Ziemian,

Dover Publications, Inc., 1982

Photo Manual and Dissection Guide of the Rat, by Fred Bohensky, Avery Publishing Group, Inc., 1986

Nasco’s Dissection Guide for the Rat, by Gari Walz, Nasco, 1999                        *This is the only book Mrs. Sutton will buy for you.  It is included in the class costs.  I photocopy portions of the others listed.*

An Introduction to the Biology of Marine Life, by James Sumich, Wm. C. Brown Publishers, 1996

Marine Life of Southern California, by Donald J. Reish, Kendall/Hunt Publishing Company, 1995

Many other handouts will be provided by instructor.

**Evaluation:**  Grades will be composed of: written tests, practicums (lab tests), research projects, written and oral reports, out-of-class projects, and dissections.

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