Basic Course Information Semester Fall 2020 Instructor Name Jim Pendley Course Biology 100: Principles of Biological ScienceEmail:pendley@imperial.edu CRN 10031 Office Hours TBA

This is a comprehensive one semester general biology course for non-majors. Includes life from the molecular to the organismic level of both plants and animals and their interactions within the environment. Special emphasis is put on human biology within appropriate areas of study. Appropriate for general education as well as nursing, preprofessional, and higher level biology courses. Includes a laboratory component. (CSU, and UCcredit limited. See a counselorStudent

Learning Outcomes Upon course completion, with a grade of "C" or better, the successful student will have acquired new skills, knowledge, and/or attitudes as demonstrated by being able to:1.Demonstrate an understanding of the steps of the scientific method. (ILO2)2.Communicate an understanding of the various patterns of inheritance of genetic traits3.Explain how the processes of natural selection influence evolution. (ILO1& ILO2)4.Perform lab activities properly, and correctly analyze lab data. (ILO1 & ILO2

Course Objectives Required language: Upon satisfactory completion of the course, students with a grade of "C" or better will be able to:

- 1. Identify the basic characteristics of all living things.
- 2. Name basic chemical aspects that pertain to life and the concept of homeostasis
- 3.Describe the subcellular components for the cell including their structure and function
- 4. Explain the light and dark reactions of photosynthesis

- 5.Explain cellular respiration and its relations to the entire organism.
- 6.Demonstrate knowledge of the structure and function of DNA and RNA.
- 7. Explain protein synthesis and site the central dogma of cell biology.
- 8. Compare and contrast the fundamentals of asexual and sexual reproduction.
- 9. Define ecology and the overall impact of ecology to conditions in the environment.
- 10. Solve problems in general genetics and in human genetics and relate advances in genetics to social responsibility of geneticists.
- 11.Identify and relate the functions of the major systems of the human body; the interrelationship among body systems and nature of disease.
- 12. Classify organisms in the kingdoms of plants and animals, discuss their evolutions and their relationships.

Textbooks & Other Resources

A student who fails to attend the first meeting of a class will be dropped by the instructor as of the first official meeting of that class.

WITHDRAWAL POLICY: If you wish to drop this class you must do so by going through the proper procedure (ie- thru WebStar) by the proper deadlines. Don't just stop showing up!!! If you simply stop showing up instead of "officially" dropping the class thru Webstar, you might receive a grade of "F" for the class!

Course Grading Based on Course Objectives Grading Scale: The student's semester grade will be determined by the total number of points the student has earned in all assigned activities . A=at least 90% of total points B=at least 80% "C=at least 70% "D=at least 60% "F= below 60%

"Make up Policy: there will be NO tests or lecture quizzes. A student may take a make up test in the next class period, only if I am forced to by college rule, court appearance (excuse or document needed), extreme personal need (my decision) Note: An incomplete grade will be assigned only after a written request by the student stating the reasons why the student cannot complete the course as stipulated in the course syllabus. If the student does not make a written request for an incomplete grade, the student will be assigned a grade commensurate with the total points the student has earned up to the time the grades are turned into the Registrar's office. IVC rules will be followed .Attendance Required language•A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add aclass. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details. •Regular attendance in all classes is expected of all students.