Basic Course Information

| Semester | Winter 2016 | Instructor Name | Jim Pendley |
|------------------|----------------------------|---------------------|---------------------------|
| Course Title & # | Biology 100: Principles of | Email | pendley@imperial.edu |
| | Biological Science | | |
| CRN# | 15034 | Webpage (optional) | |
| Room | 2717 Lec &lab | Office | |
| Class Dates | Jan 5 through Feb. 5 | Office Hours | n/a for part-time faculty |
| Class Days | Daily | Office Phone # | Leave message 355-6201 |
| Class Times | 3:00 – 5:10 PM Lec | Office contact if | Department Secretary |
| | 5:30-7:40 PM Lab | student will be out | _ |
| Units | 4 units | or emergency | |

Course Description

Required language: 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, pre-professional, and higher level biology courses. Includes a laboratory component. (CSU, and UCcredit limited. See a counselor

Student 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 traits
- 3. 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 or Links

Hoefnagels, M. (2013). Biology: The Essentials 1st edition New York, NY McGraw-Hill. ISBN: 0077701615 or 978-007-809692-1

Mader, Sylvia S. (2013). Laboratory Manual to accompany Biology 11th edition, Custom Edition(11th/e). New York, NY .McGraw-Hill. ISBN: 0077701631 CHECK BOOKSTORE

Course Requirements and Instructional Methods

Required Information—discretionary language

- ** 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.
- 1. Attendance Policy: BE ON TIME for Lecture AND the lab sessions.
- 2.Active participation in classroom discussions .All students are expected to participate in classroom discussions, in a voice easily heard by all in the room on the various topics presented in class. Learning is not a one-way process -- it requires active involvement in the subject. Expect to be ask for your comment or answer orally, as the lecture goes forward. Points are not awarded nor removed for participation.
- 3. Classroom Behavior and Conduct: The Golden Rule: Treat others how you would like to be treated, I intend to follow it as well.

Note: While in the classroom, cellular phones are to be turned off or set on silent mode. Turned Off during Tests or Quizzes. A ringing cell phone costs you 10 points of your total. If you are on call , tell me before the class starts.

4. 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 will receive a grade of "F" for the class!

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

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 both the laboratory and lecture sections.

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 make-up labs or lecture guizzes.

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 a
 class. 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. A student whose continuous, unexcused
 absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online
 courses, students who fail to complete required activities for two consecutive weeks may be considered to
 have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

Required Information -- Discretionary language

This is where an instructor explains his/her policy on these matters. Here is some suggested language:

- <u>Electronic Devices:</u> Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor. **Consider:** specifics for your class/program
- <u>Food and Drink</u> are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- <u>Disruptive Students</u>: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- <u>Children in the classroom:</u> Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

Required Language

- <u>Plagiarism</u> is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to 'cite a source' correctly, you must ask for help.
- <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Help – Discretionary Section and Language

Any additional help is extremely limited during Winter and Summer classes, ask Instructot

- Blackboard support center: http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543
- <u>Learning Labs</u>: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Study Skills Center (library). Please speak to the instructor about labs unique to your specific program.
- <u>Library Services:</u> There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Required Language: Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313, if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Required Language: Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Required Language: Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities, please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php? option=com docman&task=doc download&gid=4516&Itemid=762

Information Literacy

Required Language: Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

You can pass this course, thousands have done so with me. Do not let someone distract you from your goal. If you need to contact me, the best way is by email or leave a message with 355-6201. Pendley@imperial.edu Safety glasses must be worn in the lab exercises as directed. You must sign an online safety affirmation in order to stay in the classrooms.

| WK | DATE | LECTURE | LABORATORY | |
|----|------|-----------------------------|---|--|
| 1 | 1.4 | No Class | | |
| | 1.5 | Chp 1,intro study of life | Checkin/Assign/Safety/ Rules/regs | |
| | 1.6 | Chp 2. Chem of Life | Exp. 3 Chem. Comp. Of Cells (3.1-4) | |
| | 1.7 | Chp. 3 Cells | Exp. 2 Metric/ microscopy (2.1, 2.3-4) | |
| | 1.8 | Chp. 4 Energy of Life | Exp. 4 Cell structure /function 4.3, 4.5 tonicity (Elodea) | |
| | | | | |
| 2 | 1.11 | Chp. 5, 6 Photo/Respiration | Exp. 5 Enzymes (5.2,3,4) | |
| | 1.12 | Chp. 7 DNA | TEST #1 (Chp 1-6) BRING SCANTRON | |
| | 1.13 | Chp. 8, 9 | Exp. 7.2 Fermentation | |
| | 1.14 | Chp. 10, 11 | Exp. 8 Mitosis/meiosis | |
| | 1.15 | Continued | Exp. 10 genetics, blood typing LAB QUIZ #1 | |
| | | | | |
| 3 | 1.18 | HOLIDAY | HOLIDAY | |
| | 1.19 | Selections Chp. 12,13,14 | TEST #2 chp 7-11 | |
| | 1.2 | Selections Chp 15,16 | Exp. 25 Organization Earthworm | |
| | 1.21 | Selections Chp 17, 18 | Exp. 26. Pig | |
| | 1.22 | Selections Chp 20,21,22 | Exp 26/27 pig continued | |
| | | | | |
| 4 | 1.25 | Chp 23, 24 | Exp. 27 continued ~sheep Heart | |
| | 1.26 | Chp 24 cont. | TEST #3 Chp , selections 12-22 | |
| | 1.27 | Chp. 25 | Exp. 28 Digestion | |
| | 1.28 | Chp. 26 | Exp. 29 Circulation, air exchange, urinanalysis, kidneys | |
| | 1.29 | Chp. 27 | Exp. 30 Sheep brain, cow eye | |
| | | | | |
| 5 | 2.1 | Chp. 28 | Exp. 31 Mannikin / skeleton | |
| | 2.2 | Chp. 29 | Test #4 (Chp 23-28) | |
| | 2.3 | Chp. 30 | Finish lab material. LAB QUIZ #2 | |
| | 2.4 | Lab Practical Exam | Catch up Lectures for final | |
| | 2.5 | | FINAL LECTURE EXAM | |