Semester	Summer 2015	Instructor Name	Jim Pendley
Course Title & #	<b>Biology 100: Principles of</b>	Email	pendley@imperial.edu
	<b>Biological Science</b>		
CRN #	30003	Webpage (optional)	
Room	2717 lec and lab	Office	
Class Dates	6/24/15-7/30/15	Office Hours	n/a for part-time faculty
Class Days	See schedule below	Office Phone #	Leave message 355-6201
Class Times	15:00-17:10 lec	Office contact if	Department Secretary
	17:30-19:40 lab	student will be out	
Units	4 units	or emergency	

### **Basic Course Information**

# **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 1<sup>st</sup> 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 (Says 'Imperial Valley College' on cover ~ Beware-Check for missing pages in used books!!

**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. In fairness, if mine rings during lecture or lab the class members present will gain 10 points. 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! Check with registrar concerning fees or refunds.

Last day to withdraw with no course showing on transcript is \_June 29\_\_\_\_\_ Last day to withdraw with a "W" is\_\_\_July 21\_\_\_\_ <u>Out of Class Assignments</u>: 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 <u>and</u> 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 oe 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 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

The instructor can add the information pertinent to his or her class here. Some suggested language:

- Blackboard support center: <u>http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543</u>
- <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 <a href="http://www.imperial.edu/students/student-health-center/">http://www.imperial.edu/students/student-health-center/</a>. 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 <u>http://www.imperial.edu/index.php?</u> 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 <u>http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/</u>

#### 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. <u>Pendley@imperial.edu</u> 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				
	6-24	Chp 1, intro study of life	Checkin/Assign/Safety/Rules/etc.	
	6-25	Chp 2. Chem of Life	Exp. 3 Chemical Composiion of cells	
	6-26	Chp. 3 Cells	Exp. 2 Metric system / microscopy	
	06/29/15	Chp. 4/5	Exp. 4 Cell Structure/functions	
	06/30/15	Chp. 6	Exp. 5 Enzymes	
	07/01/15	Chp. 7 DNA	Exp. 7.2 Fermentation, Lab Reports Group I	
	07/02/15	Chp. 8, 9	Exam 1 (Chp 1-6) SCANTRON NEEDED FOR ALL EXAMS	
	07/06/15	Chp. 10,11	Exp. 8 Mitosis/meiosis	
	07/07/15	Selections Chp. 12,13,14	Exp. 10, Genetics/ blood typing	
	07/08/15	Selections Chp 15,16	Exp. 25 Organization	
	07/09/15	Selections Chp 17, 18	Exam 2 ( Chp 7-11)	
4	7-13	Selections Chp 20,21,22	Exp. 26 Pig I	
	7-14	Selections cont.	Exp. 26/27 Pig II	
	7-15	Chp 23, 24	Exp. 26/27 continued Sheep Heart Lab Reports Group II	
	7-16	Chp 24 cont.	Exam 3 (Selections from chaps 12-22)	
5	7-20	Chp. 25	Exp. 28 Digestion	
	7-21	Chp. 26	Exp. 29Circulation, urine analysis	
	7-22	Chp. 27	Exp. 30, Nervous system (Sheep brain, cow eye, etc)	
	7-23	Chp. 28	Exam 4 ( Chp 23-27)	
6	7-27	Chp. 29	Exp. 31, skeleton, /mannikin.	
	7-28	Chp. 30	Finish Lab material, turn in Lab reports III	
	7-29	Lab Practical Exam	Catch up lecture if needed.	
	7-30		Lecture Final Exam	