

### Basic Course Information

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|-------------------|---|---------------------|--|
| Semester:         | <b>Spring 2016</b>                          | Instructor Name:    | <b>Dr. Andrew Chien</b>  |
| Course Title & #: | <b>Biol 182 Prin of Organismal Biology</b>  | Email:              | <b>Andrew.chien@imperial.edu</b>                                     |
| CRN #:            | <b>20799</b>                                | Webpage (optional): |  |
| Classroom:        | <b>2713</b>                                 | Office #:           | <b>2761</b>  |
| Class Dates:      | <b>2/16/16 to 6/10/16</b>                   | Office Hours:       | <b>Mon. 1-2pm; Tues 11:10-12:10 pm; Wed 1-2pm; Thurs 1110-1210pm</b> |
| Class Days:       | <b>Tues- lecture; Thursday- Lecture/lab</b> | Office Phone #:     | <b>760-355-5755</b>  |
| Class Times:      | 2pm – 5:10 pm                               | Emergency Contact:  | <b>Ofelia Duarte, ME secretary<br/>760-355-6155</b>                  |
| Units:            | 4   |                     |  |

### Course Description

This is one of two entry level courses designed for life science, biology, health care, and science education majors intending to transfer to four-year institutions. However this course is open to all students. This course provides students an introduction to biology and the scientific method.

### Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Explain the outcome of conducting the process of science (ILO1,2)
2. Write a review of a scientific article using primary literature from peer-reviewed scientific journals (ILOS 1,2,4)
3. Illustrate an understanding of evolution through natural selection (ILO 1,2)
4. Formulate dichotomous key using organisms from within and between phyla (ILO1,2)

### Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Describe the biological characteristics of life, and demonstrate an understanding of cells, and levels of biological organization.
2. Understand the process of science and demonstrate an ability to test hypothesis.
3. Define biological evolution, and demonstrate an understanding of how genetic variation and natural selection influence biological diversity.
4. Define what plants are, and provide evidence of an understanding of plant evolution, development, structure, growth, reproduction, and selected physiological processes.

5. Define what Fungi are, and provide evidence of an understanding of development, structure, growth, and reproduction within this phylum.
6. Define what Protists are, and provide evidence of an understanding of their characteristics, structure, diversity, and reproduction.
7. Demonstrate an understanding of animal diversity, ecology, and evolutionary trends.
8. Demonstrate an understanding of animal form and function including physiological process, development, and reproduction across phyla.
9. Demonstrate an understanding of animal nervous system from the cellular level to integrated systems.
10. Demonstrate an understanding of the structure of muscles, and the sliding filament model theory.
11. Understand animal sensory system.
12. Demonstrate an understanding of population growth and regulation.

### **Textbooks & Other Resources or Links**

Solomon, Berg, and Martin. BIOLOGY. (8<sup>th</sup> e) Brooks/Cole Cengage Learning. ISBN 100495107050

### **Course Requirements and Instructional Methods**

Students must participate in all academic activities. Lectures, Lab activity, Discussion, Library research.

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**

Two hour exams- 200 points

Final Exam- 100 points

Lab work to be turn in at end of semester (before 6/2/16) 50 points

Lab practical -- 50 points

Science manuscripts- 50 points

Field trip- (optional ) 35 points.

Grades scored as follows:

90+% of total = A

80-89% = B

70-79% = C

60-69% = D

Below 60% = F

### **Attendance**

- 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.
- After a class commences all students must stay until the conclusion. You are not permitted to leave early. If you must leave early you must obtain permission from me before hand not after. Bathroom breaks are allowed.

### **Classroom Etiquette**

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: 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](#).
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

### **Online Netiquette**

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

### **Academic Honesty**

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism 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.

- **Cheating** 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 plagiarizing 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 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 Student Services**

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **Blackboard Support Site.** The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- **Learning Services.** There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your [Campus Map](#) for the [Math Lab](#); [Reading, Writing & Language Labs](#); and the [Study Skills Center](#).
- **Library Services.** 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)**

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. Please contact them if you feel you need to be evaluated for educational accommodations.

### **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **Student Health Center.** A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District and El Centro Regional Center provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC [Student Health Center](#) at 760-355-6310 in Room 2109 for more information.
- **Mental Health Counseling Services.** Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC [Mental Health Counseling Services](#) at 760-355-6196 in Room 2109 for more information.

## Student Rights and Responsibilities

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC [General Catalog](#).

## Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC [Library Department](#) provides numerous [Information Literacy Tutorials](#) to assist students in this endeavor.

|    |       |   |       |   |
|----|-------|---|-------|---|
| 1  | 02-16 | Chap. 1. What is Life                         | 02-18 | Chap. 1                                 |
| 2  | 02-23 | Chap. 1. Scientific Method                    | 02-25 | Microscope (nothing needed )            |
| 3  | 03-01 | Chap. 18. Darwinian Evolution                 | 03-03 | Dichotomous key (nothing needed)        |
| 4  | 03-08 | Chap. 19. Evolutionary Changes in Populations | 03-10 | Chap.19 Lecture                         |
| 5  | 03-15 | Chap. 20. Speciation                          | 03-17 | Chap.23. Systematics                    |
| 6  | 03-22 | Chap 52. Animal Behavior (ethology)           | 03-24 | Behavior -DVD                           |
|    |       | SPRING BREAK 3-28-4-2                         |       |   |
| 7  | 04-05 | Chap 26. Protista                             | 04-07 | Protists-slides and pond water critters |
| 8  | 04-12 | Chap 27. Seedless plants                      | 04-14 | Slides (nothing needed)                 |
| 9  | 04-19 | Chap 28. Seed plants                          | 04-21 | Plant specimens (nothing needed)        |
| 10 | 04-26 | Chap 29. Fungi                                | 04-28 | Fungi specimens (nothing needed)        |
| 11 | 05-03 | Chap 30. Introd to Animal Divinity            | 05-05 | Clams, starfish                         |
| 12 | 05-10 | Chap 31. Sponges, Protostome                  | 05-12 |   |
| 13 | 05-17 | Chap. Deuterosomes                            | 05-19 | Perch, Shark                            |
| 14 | 05-24 | Chap. 33. Plant Structures                    | 05-26 | Plant specimens- (nothing needed)       |
| 15 | 05-31 | Review  | 06-02 | review                                  |

|           |       |               |       |                    |
|-----------|-------|---------------|-------|--------------------|
|           |       |               |       |                    |
| <b>16</b> | 06-07 | <b>REVIEW</b> | 06-09 | <b>FINAL EXAMS</b> |